Appendix

Long Beach Comprehensive Plan Update, 2026

The City of Long Beach
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1.1 Public Meeting 7/5/06

Super 8 Motel, Long Beach WA

About 30 people attended the Open House, including the Honorable Mayor, City Staff and Council Members. The meeting was widely publicized on posters throughout the city and through an ad in the local newspaper. A reporter from the local newspaper was also present. Mayor Ramsey welcomed the audience. John Schelling, the Community Development Director described the impetus for the project. Anindita Mitra, the Project Manager from CREÄ Affiliates introduced team members and broadly described the project schedule. Mark Personius described the GMA rules that govern a comprehensive plan update process as well as how this will fit with the Shoreline Master Program, Critical Area Ordinance and Zoning Update tasks that he is leading. There was a lengthy Q&A session that focused on schedule details, prior experience, and community participation among others. For the remainder of the meeting, audience members walked around the room viewing maps and conversing with consultants. The following were summarized by consultants on note paper:

1.1.a. OPPORTUNTIES

- Meeting format – speed dating
- Invite businesses into the discussions
- Use reader boards for meeting announcements
- Involve the Astoria radio
- Invite local groups such as the American Legion and Elks Lodge
- Use voter registration to involve all voters

1.1.b. ISSUES

- Name tags for future meetings
- Need cookies at future meetings
- Traffic congestion on Pacific, Sid Snyder – 5th
- CAO/SMP – need to consider requiring wetlands off-site mitigations inside the city not outside
- Look at watershed – level SMP cumulative impact analysis
- Need fire buffer on city lands near residential
- Shore parks (from David) – habitat management and park design
- Cost /responsibility for pine control – the city or property owners

- Is there adequate north-south arterial capacity thru Long Beach for Peninsula buildout?
- Pedestrians/bikes don't like to use Pacific because of the traffic – they use parallel street (Ocean Beach Boulevard and Washington) instead – sidewalks are needed on these street.
- Sidewalks are built over buried phone and power lines
- Need pedestrian /bike circulation plan
- Identify Pedestrian Routes
- Identify Bicycle Routes
- Specify improvements needed (paths/sidewalks) to make these routes functional and attractive
- Need to specify where mopeds, surreys etc are to travel
- Shoreview Drive – only intermittent segments of ROW "in Hand"
- Need Shoreview Drive for local accessibility, relief of Ocean Beach Boulevard.
- E-W Beach access streets all link directly to Ocean Beach Boulevard with no other N-S connections; this puts excess pressure on Ocean Beach Boulevard auto, pedestrian and bike traffic
- Need N-S local connections west of Ocean Beach Boulevard
- Visioning (1996- or so) – Ali has documents of ideas and priorities

1.2 Public Meeting (8/1/06)

CREÄ led two public meetings with the Long Beach Community. The 4:30 PM session was the first formal meeting of the Steering Committee and included city staff, and a few other citizens totaling 21. The 6 PM session was intended to be the major public event but the outreach and publicity was insufficient and only 11 citizens participated.

CREÄ gave a brief introduction to the Comprehensive Planning structure and described the Vision Plan events agenda. The goal of the VP event was described as a chance to listen to a broad range of public opinion as to the Issues that face Long Beach, and to generate ideas about action's and values that will guide the new Comprehensive Plan.

A quick exercise had participants write their major feeling for what is great about Long Beach. The overwhelming answer was "The Beach" in many forms (11), with the rest saying the "small town atmosphere and great people" (7).

A Powerpoint presentation provided "food for thought" to the participants with 26 images of comparable small towns including Ocean City and Cape May, New Jersey, and Banff and Jasper, Alberta. These were organized into topical areas including: town form and natural habitat design, commercial and civic buildings, architectural character, street characteristics and sustainable town systems.

Following this visual component participants were asked to identify what issues, opportunities and problems they thought the Comprehensive Plan should address. Our comprehensive recorded comments are included at the end of this document. We will try and summarize into themes what we heard from the community, leading with what we interpreted as the point of emphasis.

Our participants were asked to prioritize the recorded comments with each person having 5 green dots to note their "most important issues" and 1 red dot to mark which issue "most concerned" them. The results are listed after the thematic heading..

1.2.a. OUR BEACH AND DUNE'S ARE A TREASURE (5 GREEN 1 RED)

Every participant spoke to the spiritual and commercial values of the Beach. Many residents wanted to conserve the existing shore and dunal ecosystems exactly as they are. This would include putting restrictions on beach driving, and revisiting the extension of zoning accretions resulting from the expanded shore and dunes in recent decades. Other citizens felt that shore driving is a unique and historical characteristic of the city that should be retained. In common was the belief that any development in the dunal zone should be sensitive to the local ecology and have appropriate development standards.

1.2.b. THE COMMERCIAL CORE OF HISTORIC LONG BEACH NEEDS TO EVOLVE (10 GREEN 5 RED)

Long Beach has had great success with their earlier goals of creating a pedestrian town center which would be the source of civic revenue. The small parks and historical features, and street improvements have worked. But the Pacific Avenue is the only location that has done well. Any commercial properties that are off the strip have failed at a high rate. Boarded-up buildings create a poor image for the City. This project should look at deepening the commercial core primarily to the west, but selectively to the east. There was concern about all the commerce extending north along Pacific, and that there should be considerations about how to focus the commerce in the town core including the old town. Others were concerned that commercial zoning from the center towards the ocean would work against the core commercial zone.

1.2.c. CHANGE SHOULD BE CAREFULLY GUIDED TO RETAIN OUR COASTAL VILLAGE (11 GREEN 1 RED)

There was a strong set of proponents that "we've done a lot right through incremental improvements". There was a fear that big developers and poor projects would harm the authentic character of Long Beach. A change in scale or character as Long Beach grows was thought to be danger. Nor was there a desire to be like Cannon Beach, an elite community. Beauty and history, as well as the spirit of a small community was put forward as the qualities that should be retained.

1.2.d. CONNECT AND EXTEND OUR OPEN SPACES (14 GREEN 2 RED)

Seen as the primary reason why both residents and tourists come and stay, the Ocean and Dunes can be utilized even further. Complete the Discovery Trail south to Cape Disappointment and north to Leadbetter State Park. Build the bicycle and pedestrian connections east to the Lake and Swale region which can be another way to highlight this unique ecological zone and the cranberry industry that shares this area,

1.2.e. THE ECONOMY NEEDS TO ADD VARIETY AND LONG TERM JOBS (2 GREEN)

The seasonal variations in the present tourism cycles need to be mitigated. The active seasons should be extended and deepened with new reasons to come to Long Beach. Losing so many businesses and jobs has done harm to the community. Look for new businesses that can be located here. Many ideas were put forward about for the winter Long Beach.

1.2.f. WE NEED A MULTI-PURPOSE COMMUNITY CENTER AND PARK (5 GREEN)

A place for youth and other citizens to gather, be educated, mentored and entertained was seen as a community need. High rates of unemployment and children leaving the area were lamented. There is a need for a public place for the community to build traditions that isn't a commercial or open air location. It was suggested a central park would complement such a building project.

1.2.g. LOCAL TRANSPORTATION IMPROVEMENTS (5 GREEN)

Sidewalks and pedestrian paths would improve safety. Bike lanes defined or added to existing streets would also be an important improvement. Public Transportation was only lightly mentioned, but increased frequency and routes was stated. Local traffic and parking issues were discussed in light of pedestrian and bicycle circulation and safety.

1.2.h. MARKET LONG BEACH BASED ON A GREAT QUALITY OF LIFE (2 GREEN)

This would include seeking the "intelligent tourist" that would appreciate the best in fine dining, eco-tourism related activities, and local sustainable technologies. Quiet places and a slow pace of life should be balanced with good family entertainment in the town. There was a recognition that focusing on town character and quality will in itself lead to greater economic activity and draw.

1.3 Public Meeting (9/14/06)

The meeting started with a review of the summary from the prior public meeting on August 1, 2006. An invitation was extended to the group to review the meeting summary at their leisure and contact the City should any changes be necessary. There was also some discussion regarding the current vision for the city in order to assess whether the vision is responsive to new economic and market realities. It was also suggested that perhaps the vision could incorporate stronger references to the community's attachment to its natural surroundings, cultural heritage

The meeting also included brief summaries of the three draft technical reports on land use, transportation and provide a market overview. The key observations in the three reports were validated. The audience at this meeting brought with it a major concern about the health of the local economy. The comments are as follows:

1.3.a. TRANSPORTATION

- The Trolley that currently serves large events is cool. The city should consider expanding trolley service during other times of the year.
- There is a need for more bike trails
- Perhaps the streets could be designed to accommodate slower vehicles, like golf carts
- The pedestrian environment and circulation need to be improved (particularly across SR 103)
- Improve shipping and transportation
- Public transportation to and from the outside world is not available

1.3.b. ECONOMY

- Need for Long Beach to be pro-growth
- There are no franchises, and few job opportunities
- Offers the opportunity for remote technological outfits such as phone centers, bank processing centers and so on
- Need for more tourists during winter; some activities such as clam digging, storm watching, whale watching, and birding attract a large number of people already during winter months
- Perhaps the city can create a niche for itself in eco-tourism
- There is the potential for the city to improves its marketing
- There is a problem with phone service on the Peninsula

- Restaurants and other businesses do not have the volume of business after end of day (5pm) to justify leaving the businesses open late; little night life
- Schools are good
- There should be an effort to balance the increasing number of retirees moving into the area with young families
- There is a lack of stores that offer basic services and consumables (departmental stores, specialty grocery etc)

1.3.c. IDENTITY

- The peninsula should operate as one
- Long Beach is the heart of the peninsula
- There is a need for a city center that assembles all major public uses around a public gathering space (suggested co-located uses include meeting space, library, community center, police, fire etc)
- Housing
- There is a need for affordable housing to match the projected population increase
- There needs to be better police protection in the city

1.4 Public Meeting (9/27/06)

How the Environment Shapes our Community: Critical Areas, Shoreline, Parks and Open Space

There were two workshops: the first was with the Steering Committee at 4:30 pm, and the second was a Public Meeting which began at 6:30 PM.

1.4.a. STEERING COMMITTEE

There were 7 Steering Committee (SC) members present at 6:40 pm. In addition Robert Strope, City Administrator, along with Mark Personius and Davidya Kasperzyk CREÄ presenters, were in attendance.

The SC was given an overview of the evening's agenda and there was a discussion of the formats of previous public meetings. There was acknowledgement that the SC and the Public needed to have more time to respond to information and to develop substantive contributions. There was an immediate task asked of the SC by Robert Strope. He requested that the SC write their own "Vision Statement" of what they would like to see in 20 yrs. He asked that the documents be in his office by Oct. 4, 2006.

Mark Personius presented a detailed PowerPoint presentation that described protection of critical areas and wetland functions, the wetland inventory, and shoreline management through maps, text and an overview of the regulatory requirements. Davidya Kasperzyk presented the strategic path to the development of the Open Space Element for the Comprehensive Plan.

(a) Specific Discussion Points included:

- The Wetland Inventory Maps were developed both from 1979 FEMA base maps and aerial Photo's (together comprising the data sources for the US National Wetlands Inventory or NWI) and from a wetlands inventory conducted for the City by a wetland consultant of the interdunal wetlands for the Dune Management Report in 1998-99. The maps themselves are representational of suspected wetlands and are considered to be indicative but have no regulatory role. Subsequent wetland delineation is required at the time of a site-specific project permit application in order to identify actual documented wetlands on a particular piece of property.
- The City of Long Beach has taken the legal position that City designated ROW's into the S4 conservancy area's are roads, and can be improved and developed. The Washington Dept. of

Ecology has asserted that the City cannot. This issue is unresolved.

- Robert Strope felt that the timing of the second Parks Workshop should not come before the Oct. 25th Public Meeting but after. The SC agreed and thought that the Oct. 25th meeting should be used to develop maximum participation in the later (Nov. 8) Parks Workshop.
- There was the concern stated that the "state analysis doesn't capture internal state movement…..of retiree's to the Long Beach Peninsula". Mark Personius responded that "we are talking to the state Office of Financial Management about seasonal and permanent growth models and impacts".

1.4.b. PUBLIC MEETING

- The public meeting was attended by 34 citizens and a few members of the SC.
- Mark Personius presented a detailed PowerPoint presentation that described protection of critical areas and wetland functions, the wetland inventory, and shoreline management through maps, text and an overview of the regulatory requirements. Davidya Kasperzyk presented the strategic path to the development of the Open Space Element for the Comprehensive Plan.

Subsequently the audience was encouraged to ask questions of the team members present. These questions and answers are summarized below.

QUESTIONS	ANSWERS
Does the "Best Available Science" requirement include gray literature (e.g. Fish and Wildlife memo's)	Yes, Fish and Wildlife, but no "anectdotal information".
How is the planning going to consider global warming? For example ocean level rise.	We are considering the "best available science" which suggests a 2-4 ft. rise. One has to also consider the threat of a near source tsunami with a 40 ft. surge –above the 25' near front dune.
Is there enough water pressure? I'm concerned that with all the new growth I won't be able to flush my toilet on a Sunday morning.	The city has separate plans for water and sewer capacity that are adequate (MP). This year there was new capacity added to the sewer system. Next priority is storm-water capacity. (RS)

General comments about localized flooding from new development occurring in the dunes…thought to be caused from new home construction and poor stormwater drainage design…	Should be examined as part of the review of the subdivision regulation standards and/or stormwater management plan.

(a) Specific Discussion Points included:

- We need a reliable way of monitoring engineered development in the dunal area. Need a foolproof process to assess the developments –critical review of the outcomes of the engineered and "expert" opinions. (Susan)
- The City has no integrated storm-water system. We have some ditches, lines and pumps and we are considering a whole city storm water management strategy. There is a high failure rate of localized/private on-site systems. Storm-water regulations are fast growing. A regional storm-water system is cheap. (Robert Strope)
- Interdunal wetlands may be of less "biological" value than the more mature forested wetlands west of the city, however, they remain an important aesthetic component of the seashore dune complex and provide important wildlife and other natural functions.
- Comment: the presentation was too long, there needs to be more time for comment and exchange.

1.5 Community Workshop (10/25/06)

More than 60 people attended the public workshop held at City Hall on October 25, 2006. The workshop focus was to present the attendees three alternative scenarios for Long Beach's growth in the next twenty years. After an initial project update, CREÄ presented a description of the city's form and directives for the plan. These directives are based on community direction from earlier public meetings.

1.5.a. DIRECTIVES FOR THE PLAN

- Change should be carefully guided to retain the coastal village atmosphere since residents treasure the historic town, the beach and the dunes
- Future development needs to be sensitive to both conserving the ecological function as well as the "spirit" of the community
- Connect and extend open spaces
- Develop a Civic Center that includes a new city hall, a multi-purpose Community Center and Park among other public service functions
- The local economy should be diversified to include general services and jobs for residents
- The tourism marketing for Long Beach should extend into currently "down seasons" so there is an all-year active tourist economy

Subsequently the audience was encouraged to ask questions of the team members present. These questions and answers are summarized below.

QUESTIONS	ANSWERS
▪ HOUSING: The cost of land in Long Beach has been rising steadily and is pricing out housing possibilities for moderate to low-income residents and seasonal workers	▪ This update will include strategies for more affordable housing and workforce housing for moderate income families in Long Beach
▪ TRAFFIC – Locals never use Pacific Highway during high tourist season.	▪ We are looking into alternate routes for local traffic as well as possibly creating a separation between tourist destinations and local

	retail
▪ Need to be able to safely cross Pacific Highway.	▪ We are looking at different solutions and locations for safe pedestrian and bike crossings across Pacific Highway
▪ Does the current Urban Growth Area extend to Cranberry Road?	▪ The 1996 Comprehensive Plan identified a 20-year Urban Growth Area that extends to 113th Street. The 10-yr UGA has already been incorporated into city limits
▪ POPULATION. Current population projection by the Office of Financial Management (1%/yr – about 4,000 new people in the County in the 20 yrs) seems wrong. There's seems to be more people moving to Long Beach. One should consider seasonal homes and the influx of Baby Boomers. Several non-resident homeowners are retiring in Long Beach and becoming permanent residents.	▪ The project's Steering Committee is investigating the current population projections for the city. We will tailor this plan towards population numbers that are recommended by this group. Should these numbers vary greatly from the County's estimated population capture by Long Beach, they will need to be approved by the County, the other towns in the County, OFM and CTED (Community, Trade and Economic Development)
▪ What percentage of the population is seasonal?	▪ There are no official counts for the number of seasonal homes in the city. We have estimated the numbers from site visit taken by city staff as well as Census data that lists

	many homes as "Vacant."
	▪ Based on the Census data and no change in Long Beach's growth or capture rates, we have estimated that in the next twenty years, there will be a projected increase of 249 permanent homes, and another 319 seasonal homes or a ratio of 1:1.3
▪ WETLANDS- Aren't they off limits to development?	▪ The ecological function of wetlands must not be impaired but interpretive & recreational opportunities can link wetlands to the east and west of the city.
▪ Local Food Production. (Pea Patch in City Parks?)	▪ Great idea – will include this in the plan update.
▪ Any Ideas about another east-west arterial connecting the city to Sandridge?	▪ NO. Extending 2nd to Sandridge was considered earlier but the proposal not pursued

1.5.b. THREE ALTERNATIVES

Three different futures were imagined by CREÄ team members. Each alternative presumed a similar amount of growth and varied in how tourist destinations will be located as well as how residential density would be allocated. However, each alternative reflected the same six underlying principles. These and associated strategies are listed below. It was not CREÄ's intention to create the most desirable scenario for this workshop but to have the community describe to them what was most desirable through this workshop. However, there was a quick vote taken at the end of the alternatives description. The tally is reported below.

- Foster walkability
  - *Create a clear pedestrian and trail network*
  - *Consider slower alternate means*

of travel (golf carts? Surreys? Jitneys?)
    - *Plan on a dense network of streets*
- Create a sense of "place"
    - *Clearly define the "Civic Center" and downtown*
    - *Identify other destinations*
    - *Avoid monotony*
- Integrate activities
    - *Tie neighborhoods and resorts to standard grocery stores*
    - *Locate offices downtown*
    - *Establish affordable housing to support resort and other tourism-based activities*

- Stimulate the economy
    - *Tie plan to an economic strategy or "theme"*
    - *Provide the infrastructure and spatial requirements that will support the desired economic strategy*
    - *Focus and deliberately connect tourist destinations*
- Strengthen neighborhoods
    - *Provide amenities for neighborhoods north of downtown/civic center*
    - *Delineate clear edges to foster a sense of identity*
    - *Carefully balance seasonal and permanent residential distribution*
- Increase safety factor (particularly for public investments)
    - *Locate public amenities in less hazardous areas*
    - *Reduce exposure of public safety personnel (fire, police etc) to hazards*
    - *Minimize public expenditure*

1.5.c. ALTERNATIVE SCENARIOS

(a) Green Links

This alternative assumes that Long Beach develops an ecotourism based economic strategy that celebrates the rich natural heritage east and west of the city. As such, it is imagined that in this scenario, resorts are concentrated in 3 or 4 clusters. The development rights of many "piano key properties" are transferred into these higher density resorts. This consolidates large tracts of natural areas that stretch the entire length of the beach. The taxes from these developments help

offset much of the costs to create and maintain the eco-tourism driven infrastructure. This infrastructure consists of not only clusters of activities such as museums, rentals, parking, restrooms and so on, but an extensive multimodal all-season trail network in the natural areas and through the city. Pacific Highway remains the main travel corridor through the city. Adjacent lands are upzoned for multifamily or mixed use buildings. Of these, the mixed use buildings are concentrated around downtown and the retail center in north Long Beach. The new Civic Center is located east of downtown and is distinct in its identity and use.

(b) Ocean View

This alternative assumes a reduced role for Pacific Highway in the city's economic strategy. Rather, traffic to Long Beach is redirected from SR 103 to Sandridge Road and then to either Syd Snyder or Pioneer Road. Tourist traffic enters downtown but is directed further west to two concentrations of mixed use developments at the termini of these roads. In this manner tourist traffic is primarily contained around a new north-south arterial closer to the ocean. In between, new dense yet low-rise short-term or seasonal residential development is accommodated. Through a series of land swaps, existing park lands are exchanged with "developable" lands such that the city's park is consolidated. A few green streets connect east-west and are tied to tourist amenities. Pacific Avenue is gradually converted back to a residential setting. This is buffered from the traffic with a dense boulevard treatment. The new Civic Center is a dramatic northern terminus for the downtown. The east edge of town is defined by a new multimodal boulevard that provides access to the adjoining natural areas.

(c) Heart of the Peninsula

This alternative emphasizes the role that Long Beach's downtown plays in the Peninsula. The rest of the city is pretty much left untouched. Therefore, Pacific Avenue remains a primary north-south corridor in the city and is mostly an eclectic mix of residential and retail uses. Development focus is on the downtown area. The limits are extended east and west. Towards the east the downtown area crosses and embraces the wetlands as a "central park." Development continues along 2nd Street N and Sid Snyder Road to create a new, improved sense of entry at the Sandridge Road intersection. The tight grid of the downtown area is extended into this eastern extension. This extension includes a high density of multifamily and vertically mixed used buildings. This alternative directs new population to undeveloped

properties within the city's limits, into the downtown area as well as into the 20-year UGA north of the city. Development is thus directed away from the higher priced properties on the water and increases the potential for affordable housing in either multifamily development or as a part of mixed use buildings. Retail is concentrated at the intersection of Pioneer Road and Pacific Highway in a neighborhood retail center to serve the growing residential and resort population up north. The downtown grid is also extended west in the form of retail corridors along Sid Snyder and Bolstad Avenue.

1.5.d. VOTE RESULTS

After the three alternatives were presented to the group, a quick vote showed that the audience generally favored the "Heart of the Peninsula" and the "Green Links" alternatives.

Green Links – 17; Ocean View – 0; Heart – 21

After this quick show of hands, a significant portion of the audience left and the remaining broke out into 4 groups. Below is a summary of the different scenarios proposed by the four groups.

1.5.e. WORKSHOP SUMMARIES

(a) Common Sense

This group wanted to develop two phases for the city's long-term planning: a 10-year and a 20-year plan. This group generally favored the "Heart of the Peninsula" alternative. They liked the concentrated downtown focus and wanted the district to be generally mixed use with commercial or retail on the ground level. They felt that downtown should extend to 4th or 9th Street North. On the east it should extend all the way to Washington Street but in the 20-year planning horizon it should extend to "V" Street or otherwise called Doc Hill Road. They liked

the idea of a Civic Center but wanted it to be multifunctional with recreational activities included in the proposed mix of uses. They felt that the Civic Center should be by the existing Fire Hall. There are aspects of the Green Links proposal that they liked, particularly the connections between the interdunal areas with the Mid-Peninsula wetland system. They recommended that generally the height limit for beach front properties should be lowered to 2 or 3 stories. Overall, they did not want buildings to create a "cliff-like" effect along any street or waterfront. They wanted the city's growth to be generally pro-growth & tourist oriented.

Responses to the Preference Form

- Pacific Highway should be a two way boulevard
- Downtown should extend both east-west as well as north-south
- Tourist traffic entering the city should be diverted to Sandridge but also remain on Pacific
- The City should maintain large parks along the ocean and also along Tinker Lake
- The city plan should not plan on more than 249 new homes in the next 20 years.
- The city should focus on increasing tax revenue through its Lodging and Motel Tax; Sales Tax
- The city's eastern entrance should be at Sid Snyder / Highway 103
- The city should accommodate population increase through more density in town and then extend to the east
- Mixed Use (retail) land uses should align Pacific Avenue
- The proposed Civic Center should be near current the Fire Hall
- We should have multimodal trails throughout the city and integrated with streets
- There should not be more dense development along Ocean Beach Boulevard

(b) Month vs Years

This group also liked the parks layout in the Green Links alternative along with a concentrated yet larger downtown as described in the "Heart of the Peninsula" alternative. They liked the idea of the downtown extending both east and west, and a complimentary residential retail center on Pioneer Road. They suggested that the Civic Center should be located close to where the tourists will be and that perhaps a theater and a Library could be added to the mix of uses being considered for the Civic Center. They were concerned about how the extensive parks system would be funded.

Responses to the Preference Form

- Pacific Avenue should be both (different sections) a two-way boulevard and a one-way couplet.
- Downtown should extend east
- Tourist traffic should enter the city from both Sandridge Road and Pacific Highway
- The city should maintain large parks along the Ocean and Tinker Lake. Watch the Cost.
- The city should plan on more than 249 new homes in the next 20 years.
- The city should focus on increasing tax revenue through its Lodging and Motel Tax
- The city's eastern entrance should be at Sandridge/Sid Snyder
- The City should accommodate population increase in the 20-yr UGA north
- Local use businesses North of 1st Avenue North and tourist interest businesses in the grid downtown should align Pacific Avenue
- The proposed Civic Center should be located North of downtown

- There should be multimodal trails throughout the city and integrated with streets (Half and Half)
- Yes put more development along Ocean Beach Boulevard, but keep the development low and don't increase the density.

(c) Downtown Advocates

This group favored the "Heart of the Peninsula" alternative blended with the Ocean View" alternative. They proposed that the middle of Pacific Avenue be a pedestrian mall. They would like to divert their traffic to Oregon Street. The city should have parks on both sides. However, city growth should occur within city limits. They too did not want a cliff effect along the beach.

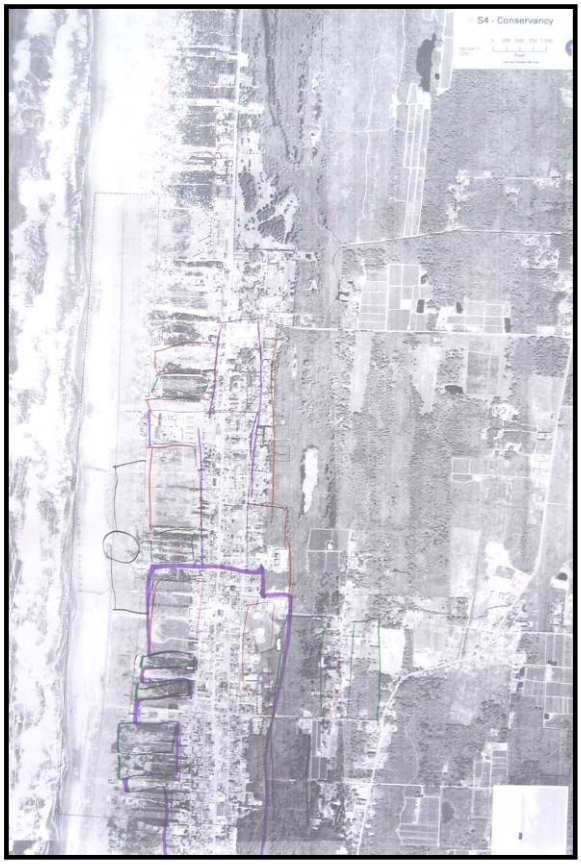
Responses to the Preference Form

- Pacific Avenue should be a pedestrian mall
- The downtown should extend east
- Tourist traffic should remain on Pacific highway
- The City should maintain large parks on both sides; Along the Ocean and along Tinker Lake.
- The city should plan on more than 249 new homes in the next 20 years?
- The city should focus on increasing tax revenue through some means other than increasing taxes.
- The city's eastern entrance should be at Sandridge/Sid Snyder
- The City should accommodate population increase in a new UGA east
- The land uses that align Pacific Avenue should maintain a small town feel
- The proposed Civic Center should be located north of downtown
- We should have multimodal trails only along the city's edges

- There should be more dense but lower rise development along Ocean Beach Blvd

(d) Seaview Advocates

This group wanted tourists to enter from both Pacific Highway and Syd Snyder Road. They want Seaview integrated into Long Beach. They proposed that Long Beach should annex Seaview to increase city revenue. This will offer current Seaview residents a certainty of development rights.



Responses to the Preference Form

- Pacific Highway should be a two-way boulevard
- Downtown should extend west
- Tourist traffic should enter from both; short roads N to S from Pacific along ocean waterfront.
- The City should maintain large parks both along the ocean and along Tinker Lake.
- The city should plan on more than 1,000 new homes in the next 20 years.
- The city should focus on increasing tax revenue through annexing Seaview
- The city's eastern entrance should be at Sandridge/Sid Snyder; Idaho/Sid Snyder; Alt 101
- Mixed-Use (retail) should align Pacific Avenue
- The proposed Civic Center should be located east along Sid Snyder
- We should integrate multimodal trails along with streets
- There be more dense but lower rise development along Ocean Beach Blvd, from Center city outward

1.5.f. SUMMARY OF PREFERENCE FORM

1	Should Pacific Avenue be			1	Pedestrian Mall
1	A two-way boulevard		A one-way couplet	2	Both (different sections)
2	Should downtown				
1	Extend west	2	Extend east	1	Both
3	Should entering tourist traffic				
	Be diverted to Sandridge	1	Remain on Pacific	3	Both
4	Should the city maintain large parks				
	Along the Ocean		Along Tinker Lake	1	Both
5	Should the city plan on more than 249 new homes in the next 20 years?				
3	Yes _1000_____	1	No		
6	Should the city focus on increasing revenue through				
3	Lodging and Motel Tax	1	Sales Tax	2	Other TBD; Seaview____
7	Should the city's eastern entrance be at				
3	Sandridge/ Syd Snyder	1	Idaho/Sid Snyder	1	Other _Alt 101_____
8	Should the City accommodate population increase				
1	In the 20-yr UGA north	1	In a new UGA east	1	More density in town
9	What kind of land uses should align Pacific Avenue?				
2	Mixed use (retail)		Multi-family	2	Small town. Local uses
10	Where should one locate the proposed Civic Center?				
2	North of downtown	1	East along Sid Snyder	1	Other _By exstg Fire Hall_
11	Should we have multimodal trails				
3	Throughout the city	1	Only along edges	1	Integrated with streets
12	Should there be more dense but lower rise development along Ocean Beach Blvd?				
2	Yes	1	No		Center City outward_____

1.6 Community Workshop (11/8/06)

Parks and Open Space – Defining Goals and Developing Planning Alternatives

The Planning Team of Anindita Mitra and Davidya Kasperzyk arrived in town near 3 PM and set out to review facts on the ground and prepare for the evening workshop. The event took place in the City Council Chambers and 31 Citizens participated as well as City Staff Robert Strope, David Glassen and Kaye Simonsen. A Powerpoint Presentation quickly gave an overview of the where we are in the project and reviewed the Natural Environment basis for the Open Space Plan.

Davidya began the session with a review of what the CREA Team has heard from the community related to the Open Space and Recreation Goals. These included:

- You love the Beach!!
- You identify yourself as a Pacific Ocean Coastal Village
- You recognize the ecological and aesthetic value of the Dunes Complex
- You see an opportunity to access and better understand the Eastern Wetland Complex
- You want to link your community resources with trails and safe pedestrian walks
- You want to be seen as an ecological tourist destination
- You want a community multipurpose center

Two discussion groups were formed that allowed citizens to review a set of goals that Davidya had prepared based upon community input. The Six Goals were:

1.6.a. PRELIMINARY GOALS FOR YOUR PARKS PLAN

1. Create an Integrated Parks System that conserves and enhances the Ecological Conservancy Lands.
2. Develop Neighborhood Parks and Facility that meet the passive and recreational needs of all current and future citizens.
3. Support the Cultural Heritage of Long Beach through the conservation of historic elements and the creation of quality interpretive facilities.
4. Use Multi-Modal Trails, Safe Green Streets and Ecological Greenways to link the elements of the Park System.
5. Promote the Park System as a recreational and ecological resource for the use of both residents and tourists.
6. Create a Financial Plan to maintain and operate existing parks elements and acquire desired strategic resources and programs.

1.6.b. REFINING YOUR GOALS

Both group sessions were comfortable with the Preliminary Goals and did not choose to

change the wording or add goals. There was a number of recorded comments about idea's and values that the Citizens wanted included in the planning of the Parks Element. These were summarized by the two facilitators and included:

Group A

- Walking, biking and moped activities using the dunes and the inland wetlands would be great.
- Public uses should include picnic, beach volleyball, and entertainment for kids.
- A boardwalk on the east would provide more opportunities for recreation/interpretive elements.
- A waterpark or pool (klipsan) would be a used asset.
- Birdwatching is an activity that is year round and would use platforms, interpretive sign and could lead to a museum/interpretive facility.
- Pocket Parks for residents, and kids in the north and south portions of Long Beach over .5 miles beyond the central park facilities are needed.
- Desired elements might be a gazebo, murals, depot museum, benches and a parking strategy.

Group B

- Who is paying for the plan? Do we need more land/parks when we are not using/maintaining what we have already?
- Need restrooms spread around for the public –with signage leading people there. It might work to have seasonal portable restrooms. Also spread garbage cans.
- Lighting (solar -subtle) on the Discovery Trail would help the perception of safety. Crating a Loop Trail east to the wetlands would be an asset. Signage could be subtle like in Ireland where yellow rock cairns guide walkers.
- Community Center and recreation needs include raquetball, swimming pool, hot hot tub.
- Let the trail change appropriately as it moves (e.g. Chehalis Trail)
- Place a library where it can be accessed easily by kids.
- Kids need hope…in a drug free environment. Safe skateboard areas…in public view. Perhaps we need a City Town Hall meeting about how to support our kids.

1.6.c. Design Opportunities and Alternative Plans

The next session was taking the ideas and trying to place them on the maps that were provided to each group by Anindita and Davidya. Citizens identified potential locations for green streets connecting the West shoreline to the Eastern Wetland area, as well as locations for parks, interpretive facilities, and community recreation facilities. These were recorded on acetate overlays. (and are included in digital photos shown below)

1.6.d. Review and Prioritization

In sharing the results of the two alternative group plans (Group A and Group B) there was a discussion of the shared concepts between the two plans. Further interest in what is really possible was demonstrated by questions that included: Can we acquire the Cranberry Farms? Should we acquire Cranberry Lake?

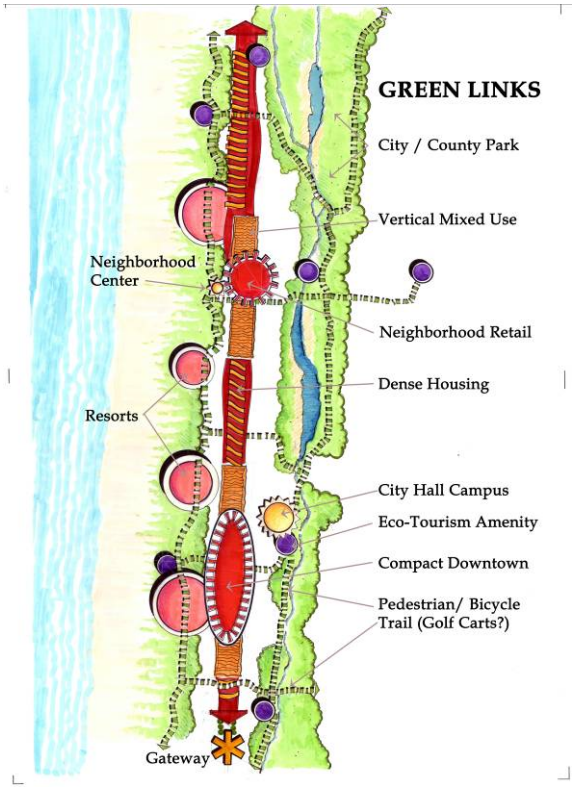
It was stated in the closing that a preferred plan option will be developed for the steering committee to consider, and form recommendations.

Group A

Group B

D. Urban Form Alternatives

1. GREEN LINKS



This alternative assumes that Long Beach develops an ecotourism based economic strategy that celebrates the rich natural heritage east and west of the city. As such, it is imagined that in this scenario, resorts are concentrated in 3 or 4 clusters. The development rights of many "piano key properties" are transferred into these higher density resorts. This consolidates large tracts of natural areas that stretch the entire length of the beach. The taxes from these developments help offset much of the costs to create and maintain the eco-tourism driven infrastructure. This infrastructure consists of not only clusters of activities such as museums, rentals, parking, restrooms and so on, but an extensive multimodal all-season trail network in the natural areas and through the city. Pacific Highway remains the main travel corridor through the city. Adjacent lands are upzoned for multifamily or mixed-use buildings. Of these, the mixed-use buildings are concentrated around downtown and the retail center in north Long Beach. The new Civic Center is located east of downtown and is distinct in its identity and use.

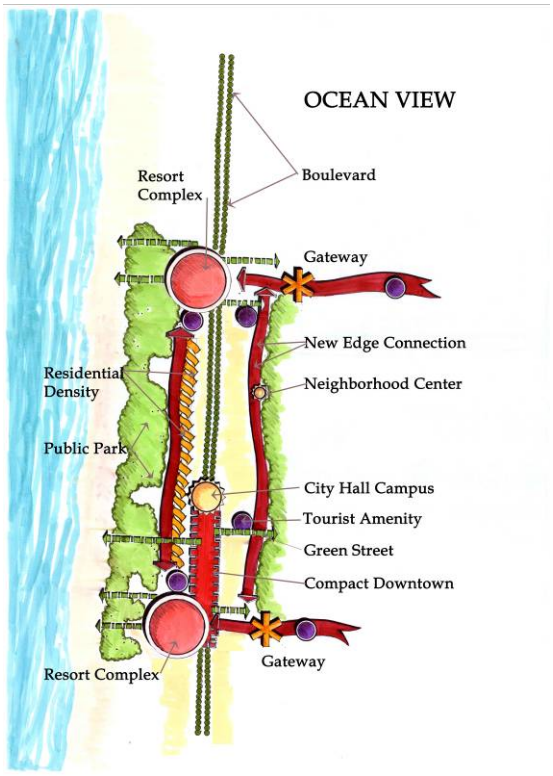
2. OCEAN VIEW

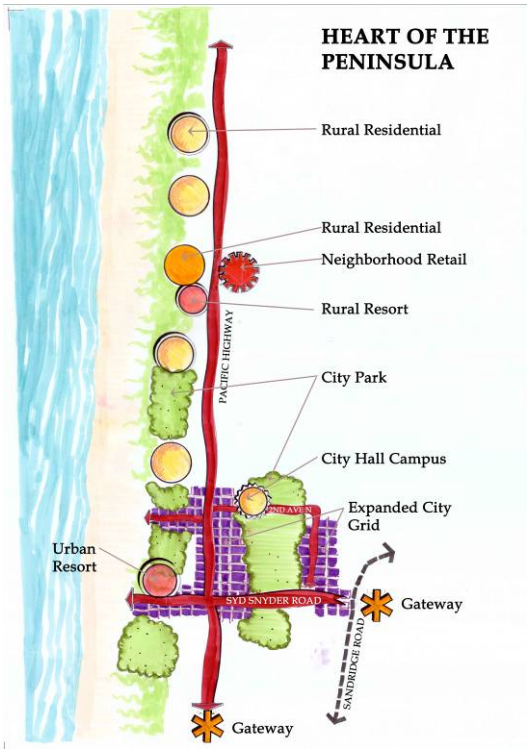
This alternative assumes a reduced role for Pacific Highway in the city's economic strategy. Rather, traffic to Long Beach is redirected from SR 103 to Sandridge Road and then to either Sid Snyder or Pioneer Road. Tourist traffic enters downtown but is directed further west to two concentrations of mixed-use developments at the termini of these roads. In this manner tourist traffic is primarily contained around a new north-south arterial closer to the ocean. In between, new dense yet low-rise short-term or seasonal residential development is accommodated. Through a series of land swaps, existing park lands are exchanged with "developable" lands such that the city's park is consolidated. A few green streets connect east-west and are tied to tourist amenities. Pacific Avenue is gradually converted back to a residential setting. This is buffered from the traffic with a dense boulevard treatment. The new Civic

Center is a dramatic northern terminus for the downtown. The east edge of town is defined by a new multimodal boulevard that provides access to the adjoining natural areas.

3. HEART OF THE PENINSULA

This alternative emphasizes the role that Long Beach's downtown plays in the Peninsula. The rest of the city is pretty much left untouched. Therefore, Pacific Avenue remains a primary north-south corridor in the city and is mostly an eclectic mix of residential and retail uses. Development focus is on the downtown area. The limits are extended east and west. Towards the east the downtown area crosses and embraces the wetlands as a "central park." Development continues along 2nd Street N and Sid Snyder Road to create a new, improved sense of entry at the Sandridge Road intersection. The tight grid of the downtown area is extended into this eastern extension. This extension includes a high density of multifamily and vertically mixed-used buildings. This alternative directs new population to undeveloped properties within the city's limits, into the downtown area as well as into the 20-year UGA north of the city. Development is thus directed away from the higher priced properties on the water and increases the potential for affordable housing in either multifamily development or as a part of mixed-use buildings. Retail is concentrated at the intersection of Pioneer Road and Pacific Highway in a neighborhood retail center to serve the growing residential and resort population up north. The downtown grid is also extended west in the form of retail corridors along Sid Snyder and Bolstad Avenue.





E. Existing Conditions (2006)

1. URBAN FORM

Long Beach is a unique tourist destination in the Pacific Northwest. It gets its distinct character from its relatively natural beach that is within walking distance from its main commercial area. Unlike other beach communities in the region where buildings creep up to the edge of the beach, the dunes create a buffer that separates the built environment from the natural. The small scale of buildings in Long Beach's "Old Town" is reminiscent of early seashore communities and thus different from other well-developed seashore communities in Washington that generally lack a distinct character.

1.1 Natural Buffer

Long Beach has a distinct form that is largely influenced by its natural setting. Framed by two long contiguous stretches of wetlands on its eastern and western edges, the city limits mirror the north-south alignment of the sand dunes that typify the Peninsula.

Decades of sand accretion from the Columbia River have extended the western edge of the city by more than 2,000 feet from its 1889 shoreline. Since the last registration of the shoreline in 1990, the beach has widened by another 15-20'. Recent studies suggest that this accretion will most likely slow down, if not reverse, during this plan period; this should be carefully monitored and planned for.

The beach area is not necessarily flat; several dune sequences have created interim swales that collect floodwater from storm surges as well as rainwater during heavy downpours. These wet areas, or wetlands provide habitat to a variety of marine life, sea fowl and shell fish. The sand dunes are a part of a larger integrated shifting dune system that shifts north along the shore.

Over years, the older dunes have been vegetated by shore pines and dune grass. Many sections have been cleared to provide a view of the ocean from developments further inland, creating an inconsistent edge and experience from the ocean. The regularity of dune vegetation is also interrupted by narrow streams of stormwater run-off from city roads.

The eastern wetlands are a part of the shoreline wetlands system. These drain into Willapa Bay on the east and are also fairly well-vegetated.

1.2 North-South Alignment

The central arterial that extends the length of the Peninsula, Pacific Avenue or State Route 103, runs east of the 1889 shoreline in a similar north-south alignment, following the route of the historic Clamshell Railroad. There are between 3 and 4 roads that parallel Pacific Avenue: Ocean Beach Boulevard to the west; and Oregon, Idaho and Washington Avenues to the east of Pacific.

1.3 Small City Grid

The city extends east-west for a few blocks across Pacific Avenue. As Long Beach extended west from sand accretion, development has followed. The introduction of Ocean Beach Boulevard created a new series of plats due west of the old historic settlement along Pacific Avenue. Historic Long Beach offers a pleasant walking environment characterized by a small city grid, well-tended sidewalks and small plazas and attractive streetscape features. A small grid pattern is critical for a "walkable" city and also helps slow down traffic. With the expansion of the beach and dunes, properties extended even further west and were subdivided. This created an unusual situation. Rather than the small walkable city grid that typifies historic Long Beach, this part of the city features narrow dead-end streets that provide access to linear subdivisions. In some areas along the shoreline and the eastern edges of the city, large properties stretch across several blocks. These have no intermediate access and create long blocks.

Earlier in the 1990s, the city initiated an effort to extend the city grid and connectivity into this western edge. A new north-south road alignment, Shoreview Drive, was proposed approximately 500 feet west of Ocean Beach Boulevard. The city may require that developments along the route of the proposed Shoreview Drive in the shoreline dedicate right-of-way and construct their portion of the street according to the city's standards for a collector street. This currently applies to every new development permitted in the shoreline area. Several stretches of this right-of-way are already paved. It is unlikely that Shoreview Drive will stretch continuously throughout the length of Long Beach. It will, however, provide much needed access and improved walkability to areas that are being developed.

1.4 Building Form and Distribution

Long Beach is predominantly a residential community with a large number of single-family homes, mobile homes and recreational vehicles. The "core" of the city is a densely packed series of single (with a few double) story buildings along Pacific Avenue. Some of the two-story buildings have residential uses above, although most have office space on the second floor.

Along Ocean Beach Boulevard and further west, many developments extend a full block if not two. This creates a skyline distinguished by long indistinct buildings.

This alignment also blocks view of the dunes and the ocean from buildings and streets further inland.

1.5 Village Character

Long Beach has adopted an "early sea shore" architectural theme. The intention of the "early seashore theme" was to capture and reflect the architectural styles of early settlements along the Peninsula. In newer sections of town, the notion of a "contemporary seashore theme" is applied. This reflects the more modern architecture associated with the newer and developing portions of the city. The City has adopted design guidelines that require buildings to be predominantly shingled, with gabled roofs, front porches, and similar features. This is evident in the "commercial core" along Pacific Avenue as well as in the residential and resort areas to the west. Further beyond the core, the integrity of the early sea shore architectural character rapidly fades.

Several city policies and programs influence and direct the architectural character of buildings in Long Beach: Design Guidelines, Zoning and Design Review. Each contribute to Long Beach's unique aesthetics and identity, and address a different aspect and level of detail of a building's design and contextual fit.

1.6 Summary

Long Beach is pursuing a niche in the ecotourism industry. For most communities, but particularly for tourism-based communities, the city's character and ambience along with communal attitude and friendliness are its strongest selling factors and a key to a successful economy. In Long Beach, equally important is the city's ability to integrate and balance its development with its unique environment that has drawn visitors to the area since the late 1800s. Consequently, the plan and development regulations for Long Beach must lay an important emphasis on enhancing local character, not only for its downtown area, but throughout the community. The city's skyline from the ocean is still being formed with every new development. This planning process and related regulations should address whether the current trends of tall resort building reflect community desires or should new resorts be formed differently. Experience and memorability of a place is formed by the surrounding architecture and public spaces, in addition to programmed activities. Therefore, investors partnering in Long Beach's future must understand the importance of creating a sense of place, a parcel at a time.

2. EXISTING LAND USE

2.1 Population Trends

In 2006, Long Beach registered 1395 residents and ranked about 179th among cities in the State of Washington. In the past 6 years its rank has slipped from 176th indicating its proportionally slower growth rate. The 172 persons it gained since 2000 can be largely attributed to annexation (75 persons). In terms of density, at 791 persons/square mile, it ranked even lower at 214th within the state.

The average family size in Long Beach is 2.6 persons while the average size of households is about 1.9. While the family size is comparable to the rest of Pacific County, it appears that generally households in the rest of Pacific County are larger, at about 2.3 people. This may be tied to the greater number of manufacturing jobs within the county. This should be investigated further, particularly for its impact on housing. Long Beach has a larger proportion of residents who are well-educated. It also has a higher percentage of disabled residents (33%) when compared to the County (27%). This may partially account for the comparatively lower income ($23, 661 for households and $21,266 for median family income as per the 2000 Census) levels in the city when contrasted with the County ($31,209 for median household and $39,302 for median family income). The lower income level can most likely also be attributed to the city's tourism-based economy, with its predominantly low-wage service jobs.

2.2 Land Use Trends

Long Beach maintains a fairly low-density ambience, with a high percentage of its area still vacant and undeveloped (22%). With another 20% dedicated as parkland and another 18% to shoreline use, Long Beach blends with the rest of the County in terms of its development. This is partially due to the fact that, prior to enactment of the Growth Management Act, much of the Long Beach Peninsula was seeing low-density development on 1 to 5-acre lots. With another 14% of the city's properties dedicated to roads, only 26% of its land area has been developed. It appears that the average Floor Area Ratio for most developments varies between 0.25 and 1.

From the existing land use map it appears that Long Beach is primarily a residential community with over 1,122 residential properties. The 2000 Census projections are close, estimating 1,293 housing units in 2006. There are about 351 multi-family units and about 34 parcels in recreational vehicle parks. This implies that with 660 households in the city, there are a large number of "second" homes, some of which are vacation rentals. Most of the residential properties average 5,000 to 7,000 square feet. The multi-family properties are larger and average about 10,000 square feet. There are about 24 mixed-use properties that comprise less than 0.25% of the city's land area. Since much of these are in the downtown (Old Town) area, they are small properties and average about 4,500 square feet. There has been very little industrial development within city limits. The properties zoned for industrial use are fairly large and average about 32,000 square feet. A significant percentage of industrially zoned

land is owned by the City and Pacific County, thereby precluding industrial development without a change in ownership.

Figure E-1: Existing Land Use Map (2006)

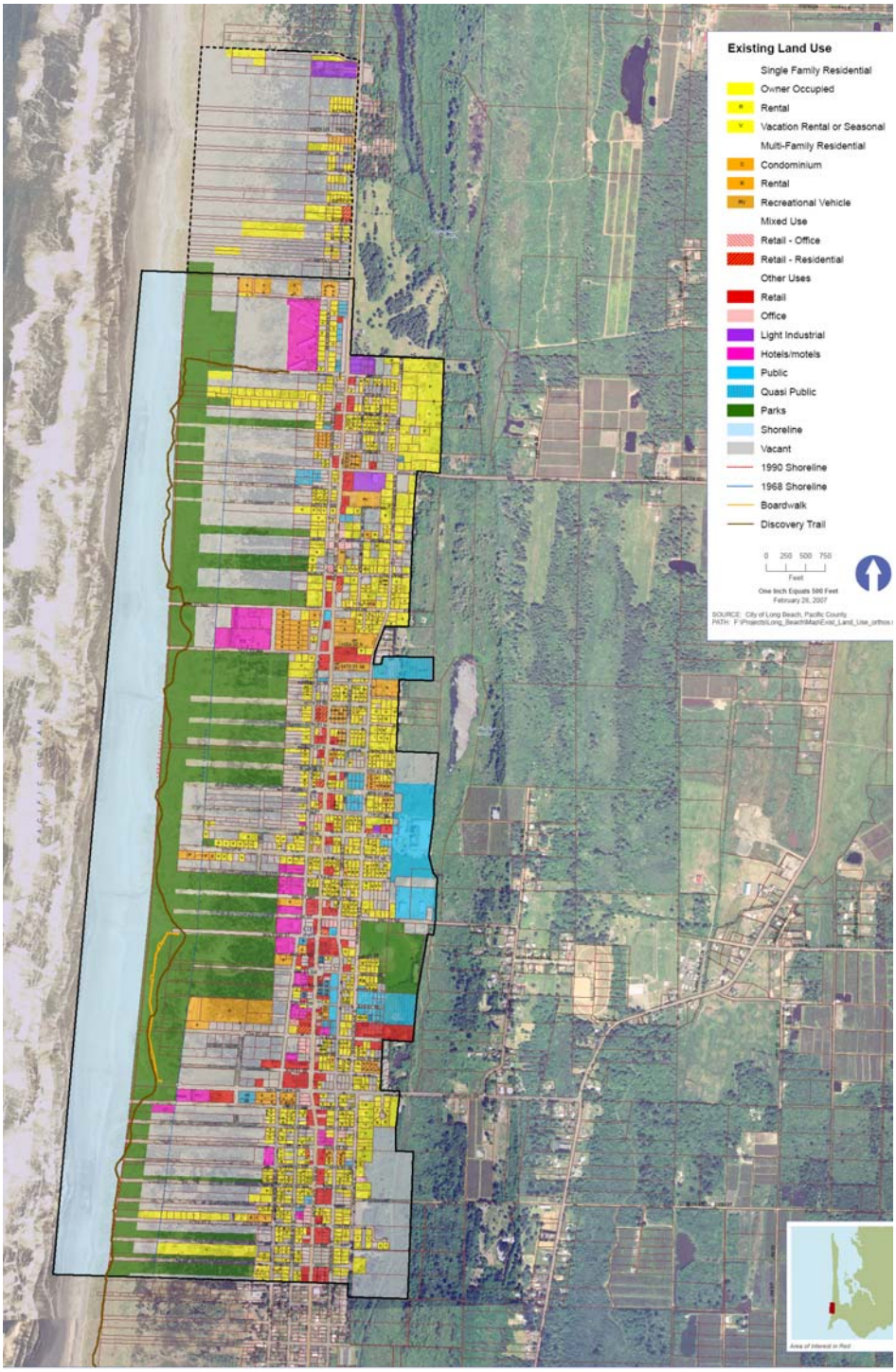


Table E-1: Distribution of Land Use and Parcel Sizes (2006)

CITY OF LONG BEACH

TOTAL	**1,174**		**2,448**	**14,093**
LAND USE	**ACREAGE**	**%TOTAL**	**NO. OF PARCELS**	**AVG SIZE OF PARCEL**
SINGLE FAMILY RESIDENTIAL	**157**	**13%**	**1,013**	**7,000**
Owner Occupied	83		487	7,423
Rental	15		84	7,793
Vacation Homes	59		442	5,784
MULTI FAMILY RESIDENTIAL	**40**	**3.4%**	**163**	**10,690**
Condominiums	3		30	4,026
Rental/Apartments	26		79	14,489
Recreational Vehicle	9		34	11,531
Mixed-Use Housing	2		20	5,139
COMMERCIAL	**36.6**	**3%**	**284**	**5,614**
Office	5		41	5,457
Retail	27		230	5,158
Mixed Use Commercial	0.6		4	5,445
Light Industrial	4		9	31,888
RESORT	**27**	**2%**	**46**	
Hotel/Motel	27		46	25,770
PUBLIC	**23**	**2%**	**35**	**28,240**
QUASI PUBLIC	**19.7**	**1.7%**	**91**	
Arts and Entertainment	1.7		13	
Church, day-care etc	16		63	
Transportation	2		15	
OPEN SPACE/ ROADS	**613**	**52%**		
Parks	231	20	158	63,696
Rights Of Way	168	14		
Beach/ Natural Area	214	18		
VACANT	**255**	**22%**	**658**	**16,858**
MISCELLANEOUS	**4**	**0.3%**		

Source: City of Long Beach GIS

2.3 Relationship of Use to Zoning

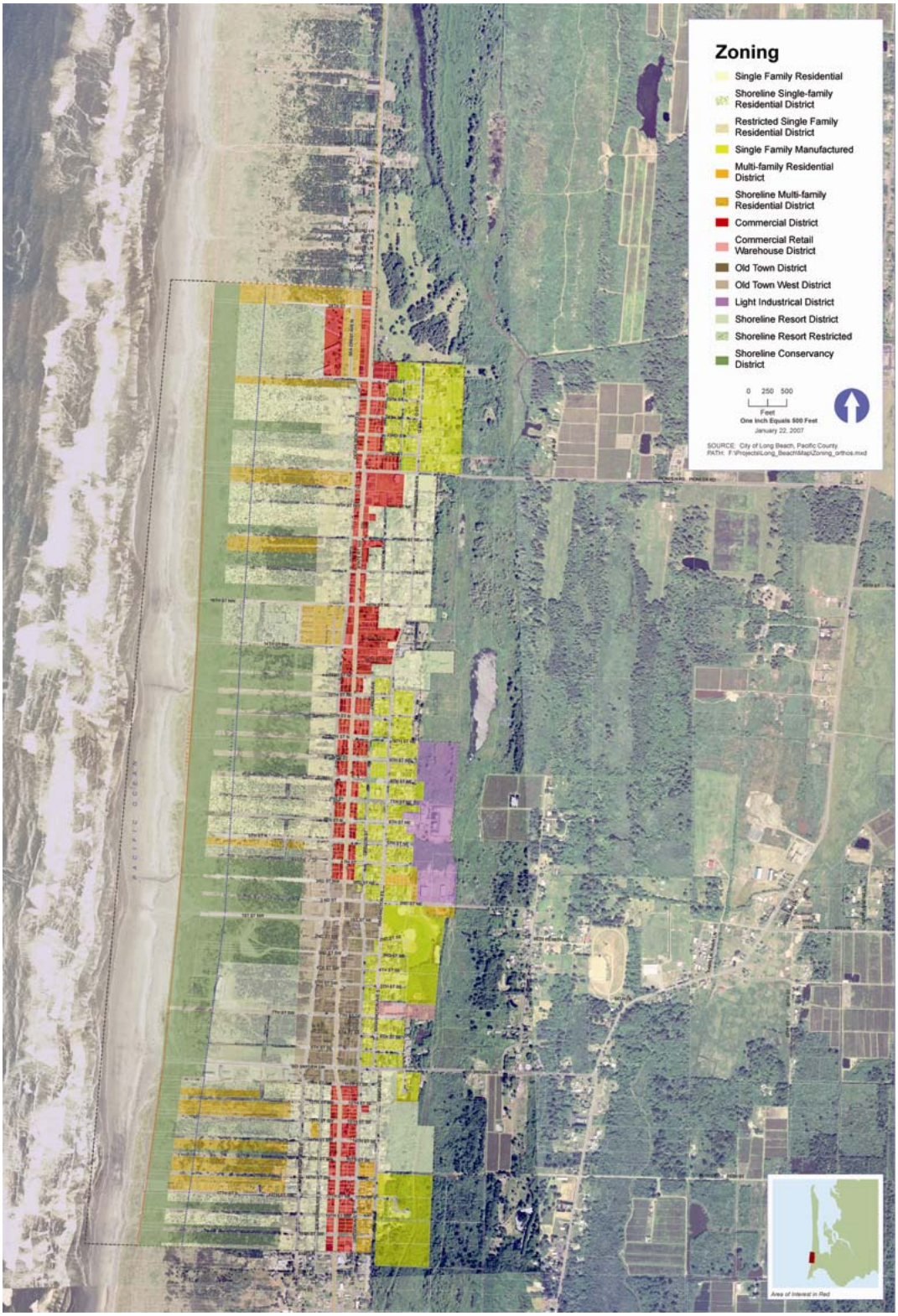
The land use pattern in Long Beach mostly echoes the zoning regulations for the city. The zoning pattern is fairly straightforward. The uses are primarily segregated with

minimal mixed-use district(s). Almost all the commercial uses are along State Route 103 while single family residences are directed to areas east and west of the highway. There is a large pocket of industrial land that is primarily used by the City of Long Beach sewer treatment plant and Pacific County. A few other zoning categories, the Old Town and the Old Town West Districts, support a mixture of uses that range from predominantly retail and hotels to a smattering of offices and public uses. Fingers of the Shoreline Single-Family and Shoreline Multi-family Residential Districts extend into the Shoreline Conservancy District. Most of the city's vacant land is in these districts. The Shoreline Resort District lands are also surrounded by Conservancy District lands, and are the primary location of itinerant lodging.

Figure E-2: Distribution by Current Zoning

EXISTING ZONING	ZONING DESCRIPTIONS	TOTAL (ACRES)	% TOTAL
C1	Commercial District	69.70	6%
C2	Commercial Retail Warehouse District	3.31	0%
L1	Light Industrial District	25.07	2%
OT	Old Town	34.45	3%
OTW	Old Town District West	13.08	1%
COMMERCIAL		**145**	**12%**
R1	Single Family Residential	65.37	6%
R1MH	Single Family Modular Residential	109.63	9%
R1R	Single Family Residential Restricted	46.58	4%
R2	Multi-family Residential District	8.16	1%
S1	Shoreline Single Family Residential	67.39	6%
S2	Shoreline Multi Family Residential	67.82	6%
RESIDENTIAL		**365**	**31%**
S3	Shoreline Resort District	33.72	3%
S3R	Shoreline Resort Restricted District	57.02	5%
RESORT		**91**	**7.8%**
S4	Shoreline Conservancy District	210.97	18%
ROW	Rights-Of-Way	148.00	13%
BEACH	Beach/ Natural Area	214.00	18%
OPEN SPACE/ ROADS		**573**	**49%**
TOTAL		**1,174**	

Figure E-3: Zoning Map (2006)



It is apparent that between the commercial districts (C1, C2, L1, OT, OTW) commercial zones occupy about 12% of the city's total land area. If we consider only developable properties and exclude rights-of-way, shoreline and shoreline conservancy zones, then the same commercial areas account for almost 24% of developed area. However, only 50% of the city's land can be counted in the developable category since the Conservancy Zone and the Beach contribute to about 36% of the city's land area, with rights-of-way contributing to another 13%.

2.4 Residential Land Use Trends

Residential land accounts for about 13% of the city's area. At the time of the 1999 Comprehensive Plan, single family residences represented about 81% of the housing stock. Currently, a land use reconnaissance shows that there has been a greater interest in single family homes (not including recreational vehicles) over the past 7 years such that they now represent about 86.7% of the housing stock and a total of 1,013 properties.

2.5 Commercial

Properties on either side of Pacific Avenue allow and are developed for commercial purposes. They create a cohesive core around Bolstad Avenue. Some of these developments are double story with offices on the upper floors. Most, however are single story and predominantly retail. There are a few offices, auto repair stores, banks and so on outside the Old Town District. Further north, there is a concentration of stores related to home improvement (paint, hardware etc) and a tight neighborhood commercial node at 9th Street North. It is evident that few commercial establishments outside the core adhere to a rigorous architectural expression. Furthermore, many have their parking adjacent to Pacific Avenue, the main approach and thoroughfare through town, and are interspersed with vacant properties, thus weakening the distinctiveness of the commercial experience in town.

2.6 Light Industrial/Intense Commercial

There are no heavy industrial uses within Long Beach city limits. There are several properties used for "intense commercial". Some of these are zoned industrial and some C-1 (storage and a bottling plant). There are no privately held vacant properties that currently allow industrial uses. Pacific County Offices on 2nd Avenue N may vacate their properties in the future. If so, then those properties may become available for private industrial development. The City is the largest landholder of industrially zoned property. While a small portion of this is currently in use for a sewage plant and offices, it may be prudent for the city to retain all of its property to allow for expansion of this facility in the future.

2.7 Institutional/Public

Currently there are no official zones for public uses. Therefore public facilities have been constructed in lands zoned for either industrial, single family or commercial uses. Public uses are generally concentrated within blocks of the Old Town area.

2.8 Vacant Land

Estimates show that even in 1996 there were a large number of properties within city limits that were zoned for some type of development and were undeveloped. In 2006, GIS data shows that approximately 255 acres or 22% of the area within the city is vacant. Much of this land comprises large linear shoreline properties. Development on these properties is regulated not only by city review but has to adhere to strict state shoreline master program regulations. Several large vacant properties at the eastern extremities of town offer more flexibility in site planning. However, they too have large stretches of wetlands. Any development in these properties will also have to adhere to SMP regulations for shoreline wetlands mitigation.

2.9 Rights Of Way

Estimates show that nearly 14% of the city's land has been dedicated to roads and public rights-of-way. Long Beach was originally platted with 50-foot street rights-of-way. From 4th Street North to 13th Street, the east-west streets were platted at 75 feet wide. Over the years, however, the city has sold some rights-of-way so that most of these streets now measure 50 feet. The streets, 22nd to 26th Streets north of Pioneer Road, are 40 feet wide. The city has been requiring that property owners adjacent to Shoreview Drive dedicate 60' rights-of-way with the intentions that one day this would provide an important relief to traffic navigating through the few north-south streets in town. There are several narrow rights-of-way. For instance, 2nd Street is 16 feet, 6th Street S is 10 to15 feet and 8th Street SE is 25 feet wide. There has been no discussion of the city purchasing additional right-of-way along these streets and in fact has converted one, 2nd Street South, to an east-west pedestrian connection.

2.10 Density Distribution

Multi-family units are scattered throughout the city. Most of these are apartments and lie west of SR 103, though there are several smaller properties east of SR 103 in no specific pattern. The three existing condominium complexes are also randomly located within the city. Hotels and motels, too, have sprung up west of the highway with a few small properties south of 5th Street South lying east of SR 103. Most of the large buildings in the city are hotels or condominiums. Within the Shoreline Multi-family Residential District or the Old Town West District, these facilities tend to be 4-5 stories tall. The seasonal nature of the lodging industry has recently prompted several property owners to convert their facilities to condominiums or vacation rentals, including time shares. There are about 24 properties that comprise a mix of uses (mixed-use). Some of these have retail on the ground floor with a floor of offices above. These also occur randomly along the highway. About 20 properties have housing above retail.

Officially designated affordable housing options do not exist in the city. Anecdotal evidence suggests that those seeking lower priced home find options outside city limits. Recreational vehicle parks also offer a higher concentration of density, but unlike other multifamily options in the city they support a lower cost of living. Therefore, they are important in providing affordable housing to the city's lower to

moderate income families. Trends elsewhere suggest that as development picks up, these parks are heavily targeted for replacement by more expensive multifamily or higher density single family development.

2.11 Summary of Issues

Land use distribution in the city follows the zoning layout fairly consistently. There are only a few instances of "spot" zoning which could (though are not known to) create incompatibility between adjacent properties. Despite the development interest in the Peninsula as a whole, there are many properties within the city that are still vacant or underused. This could imply an inconsistency between the distribution of zoning and market realities and severe environmental limitations to development, among other factors. There are also few opportunities for multifamily units. These will become more desirable to accommodate not only the lower-income population that supports a tourist economy, but also a higher concentration of the elderly, many of whom seek assisted care living options.

3. HOUSING

3.1 Owner Occupied Units

The 2000 Census shows that only 57% of all housing units were occupied in Long Beach. It can be implied then that the 43% of the remaining units are second homes or vacation rentals of some kind. This number corroborates with the information in the city's GIS database. The city's database was developed through a site reconnaissance of every property in the city by City Staff, during the course of this project. Of the occupied units, about 56% were owner-occupied.

The City has developed a map that shows existing land uses (see **Error! Reference source not found.**). In this map, single family homes are distinguished between owner-occupied (487), rental (84) and seasonal (442). The same level of information is not available for multifamily units, though it is known that of the 143 multi-family properties most are rentals (79) and about 30 are condominiums and 34 are in recreational vehicle park use.

3.2 Housing Values

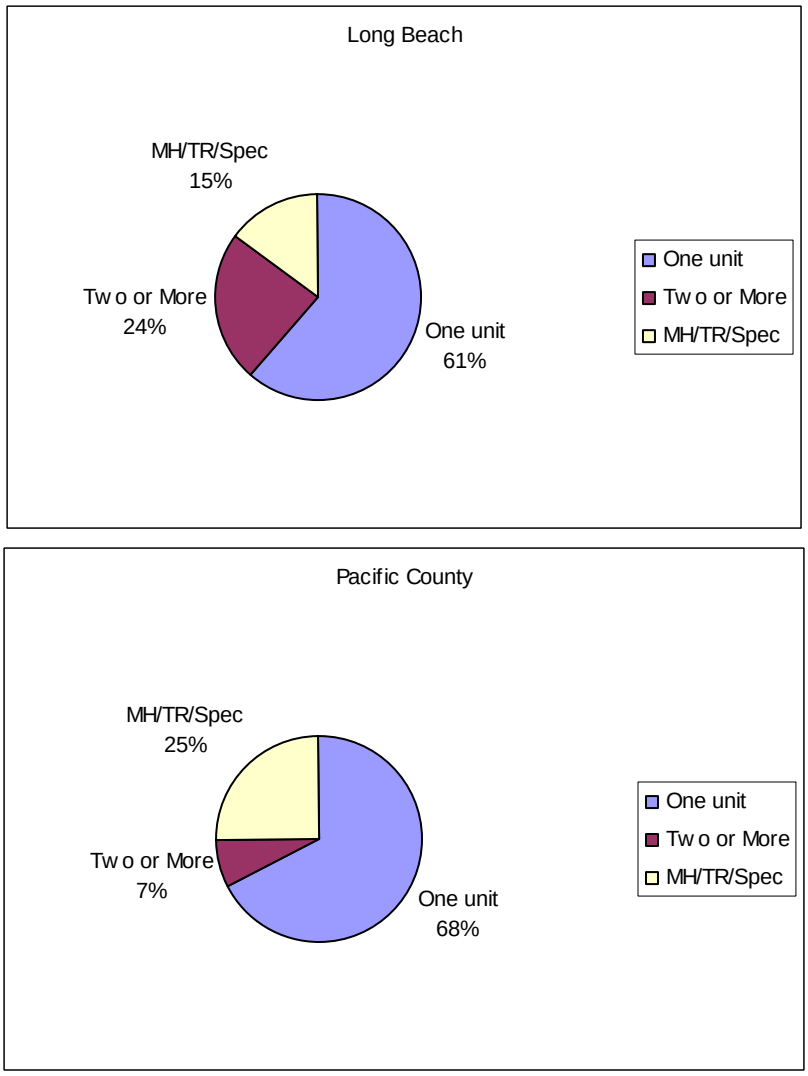
The 2000 Census indicates that the median housing value in Long Beach was $109,000. Property values have risen since then, and the median home price in 2006 was approximately $170, 500.

3.3 Housing Market

Long Beach currently has a mixed supply of housing product, including single-family residential, multi-family, owner-occupied, seasonal, and rental. According to numbers from the Office of Financial Management, Long Beach tends to have more multi-family housing than the rest of Pacific County, as shown in Figure 2. Part of the explanation for this trend toward more multi-family housing is the demographics of the residents of Long Beach, as well as the vacation and second-home market. As noted earlier, Long Beach has a higher proportion of older adults which may mean more "empty nesters" seeking a respite from house and yard maintenance.

Figure E-4: Housing Units by Structure Type

April 1, 2005 Estimate



** MH/TR=Mobile Home/Trailer: Fifteen to 20 percent of the mobile homes and house trailers in Washington are usually classified as single family houses in the decennial census.*

** Spec= Special: Unusual living quarters not generally considered a housing unit (e.g. boats, boxcars, tents, recreational vehicles, etc.). Only counted when occupied by person meeting "resident" criteria.*

Source: State of Washington Office of Financial Management.

For GMA, the Office of Financial Management prepared coordinated county-level population projections for every county in the state of Washington. According to the intermediate forecast, the state is expected to grow in population to nearly 8 million

in the state by year 2025. Pacific County, with just under 21,000 people in 2000, is expected to experience modest growth, reaching an estimated 22,678 by year 2025. (See Figure H-1: Projections of Total Resident Population for the Growth Management Act.)

3.4 Household Incomes and Suitability of Housing Product

The disposable income of a household determines whether that household is able to make certain choices about its housing. Obviously, households with very limited income are less able to afford single-family housing and are especially out of reach of higher-priced housing. One concern in providing housing is the current lending criteria of for-sale units. The mortgage lending community has developed income requirements for various loan amounts. The elements that go into these calculations include:

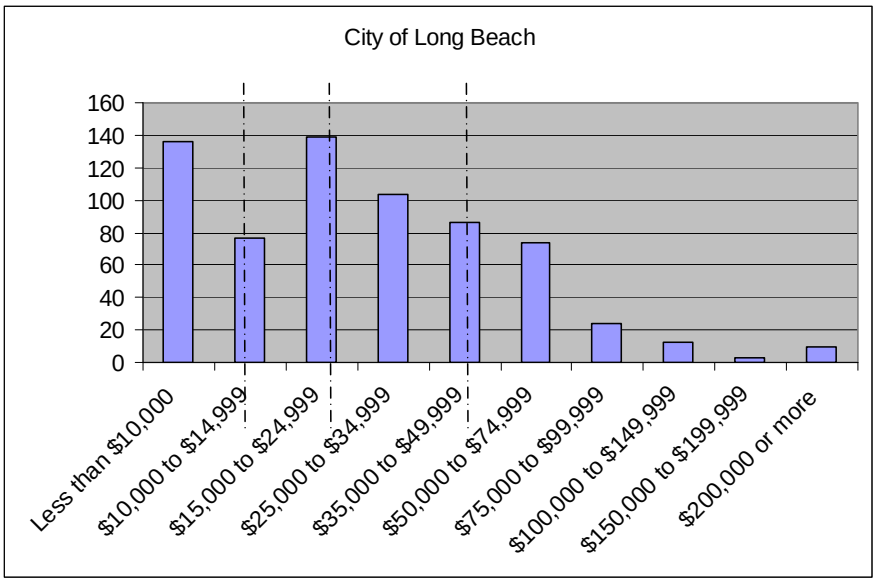
- Ratios of income to total monthly housing costs
- Mortgage terms
- Down payment capability and financial condition
- Credit history

The ability to make a larger down payment lowers the income threshold, but few lower-income households possess the resources to make larger down payments. The remaining households must either purchase from the established inventory of lower-cost housing in the area or rent an apartment or single-family house, as their means allow. Further, most lower-cost housing consists of older mobile homes, for which lending is not readily available. To analyze the suitability of various housing products for different market segments, households can be divided into income quartiles. A quartile is determined by arraying all households by their income and dividing that array into the top quarter, the middle-top quarter, the middle-bottom quarter and the bottom quarter for all households.

The median household income in the City of Long Beach in 1999 (from the 2000 census) was $23,611. At maximum loan and under standard lending conditions, this income level would be adequate to purchase a home valued at approximately $80,000. Again, according to the 2000 census, the median value of an owner-occupied single-family home in 1999 was $109,600, putting homeownership out of reach for the majority of households in Long Beach.

Admittedly, these figures from 1999 are somewhat dated. For a more recent illustration, the Federal Financial Institutions Examination Council (FFIEC) provides estimates of family income for year 2006 by census tract. The FFIEC estimates this area's 2006 family income at $37,956. This compares to the Census' median household income in 1999 for the City of Long Beach of $23,611, suggesting that newcomers bring increased buying power to the area.

Figure E-5: Households of Long Beach by Household Income (1999)



Source: U.S. Bureau of the Census.

The Long Beach real estate market is tracked by two multiple listing services: the Realtors' Multiple Listing Service (RMLS) and the NorthWest Multiple Listing Service (NWMLS). Between these two listing services, there were a total of 42 residential properties sold between January 1 and October 26, 2006. Ranging from $66,600 to $532,500, these sales averaged $195,550 with a median of $170,500. (See **Figure H-2**) These price levels would require a monthly income of about $4,500 or more, about 40 percent more than the FFIEC estimated family income. With these income levels and price points, affordability of suitable workforce housing is a concern. So, though household incomes have increased somewhat, housing prices have increased at a greater pace, keeping housing out of reach for many Long Beach residents.

One factor affecting the cost of housing is the presence of second homes. The housing market is comprised of households who want to buy homes in Long Beach. These households may be looking for primary homes, second homes, or retirement properties. One concern is that the second-home buyers are bidding up the prices, making the market unaffordable for households searching for primary homes. According to the FFEIC-updated census information, the 1,169 housing units in Long Beach include 365 owner-occupied units, 319 renter-occupied units, and 495 vacant units. Presumably, a large number of the vacant units are seasonal residences, rather than vacant units currently on the market.

As noted earlier, the composition of the housing stock in Long Beach reflects more multi-family housing units than the rest of Pacific County. It may be possible to channel some of the second-home market toward condominiums and other forms of multi-family housing, taking advantage of the population in-migration to Long Beach.

These in-migrants tend to be in the older age cohorts, who may welcome a respite for yard and home maintenance.

3.5 Summary of Issues

Over the past decade, the cost of housing in Long Beach (along with the rest of the state) has soared. While this has created opportunities for financial windfalls, this has severely limited options for starter homes for first-time buyers and the elderly or the physically challenged. Several trends in Long Beach will need to be taken into account as the city develops its housing policies. First, as the city creates an economy based on tourism, it will need to work in partnership with local hotels and businesses to create options for these workers to stay within city limits. Otherwise, the cost of this development is passed onto the full community as they then have to address the need for wider roads to accommodate a larger commuting population and associated parking. Secondly, to retain local population, it is important that the city encourages multi-generational housing options, including those that will cater to the aging population such as assisted living care facilities. Lastly, while a large seasonal home portfolio caters to generally wealthy non-resident investors and appears to be fiscally beneficial to the city, thanks mostly to creative financing methods; it takes a toll on the city's livability and affordability, by driving up the price of homes beyond the range of families and smaller households seeking to live in the city. There appears to be a growing appetite for multifamily condominiums that cater to the temporary or seasonal resident. Appeasing this market demand will need to be balanced with the need for short-term hotels that will bolster the local tourism economy.

4. ENVIRONMENT

4.1 Topography

The City of Long Beach is located in the southwestern corner of the State of Washington, along the Pacific Ocean. It is situated near the base of the Long Beach Peninsula in Pacific County. To its immediate south is the unincorporated area of Seaview, with the city of Ilwaco another mile further south. The city of Long Beach is on relatively flat, sandy ground, ranging from the dune area on the west, to a chain of lakes on the east. The elevation ranges from sea level to 25 feet, with a mean tidal range of 8.1 feet. Towards the west the wetlands lie at an average of 13 feet above sea level. The grade rises to about 15 feet along SR 103.

4.2 Climate

The climate in Long Beach is characterized by cool, relatively dry summers and moderate winters with considerable rainfall. The annual rainfall is around 80 inches. Rain averages about 9-12 inches from November through March and in the range of 2-6 inches for the rest of the year. The mean monthly temperatures vary from 40 degrees Fahrenheit in January to nearly 60 degrees Fahrenheit during summer. The average daily maximum for summer is 66 degrees Fahrenheit with the highest ever recorded temperature at 95^{o}F. During the winter the average daily minimum is about 36^{o}F. The lowest temperature on record is 9^{o}F.

4.3 Wind Characteristics

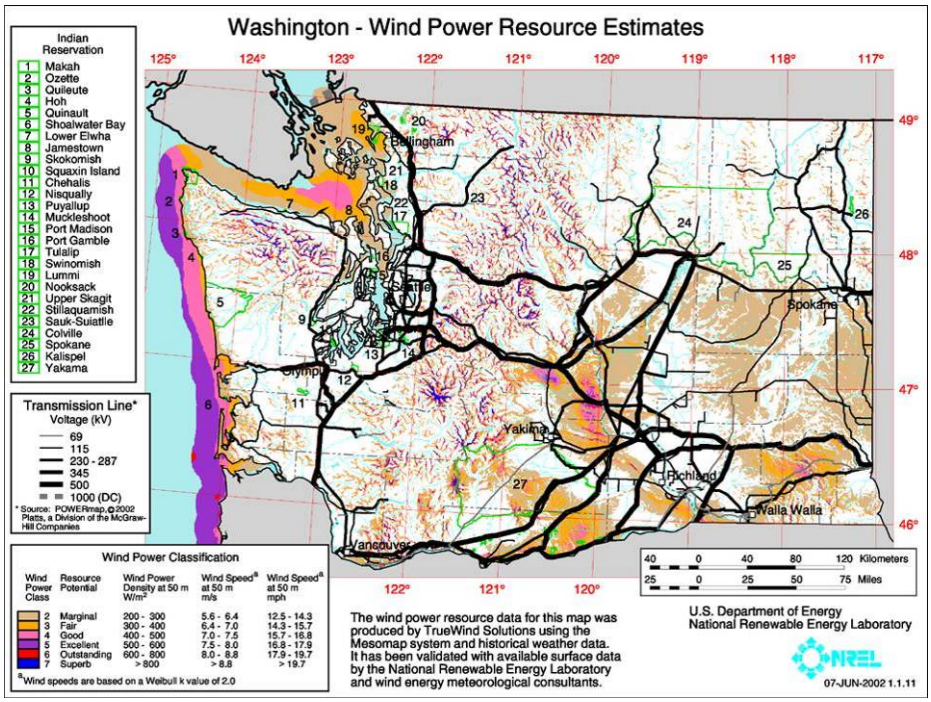
The prevailing wind direction for Long Beach is generally easterly for most of the year, with northwesterly winds prevailing during the summer month. See Figure E-6. While the monthly averages are modest, occasional gales can reach up 50-100mph during winter months.

Figure E-6: Wind Data, National Oceanic Atmospheric Association

	J	F	M	A	M	J	J	A	S	O	N	D
Astoria, OR	E	E	E	S	W	W	NW	NW	NW	E	E	E
	8.8	8.5	7.8	7.8	7.8	7.8	8.1	7.3	6.8	6.8	7.8	9.2
Hoquiam, WA	E	E	E	W	W	W	W	W	W	E	E	E
	11	11	10	9.6	9.4	9.2	8.6	8.1	7.7	8.5	9.8	11

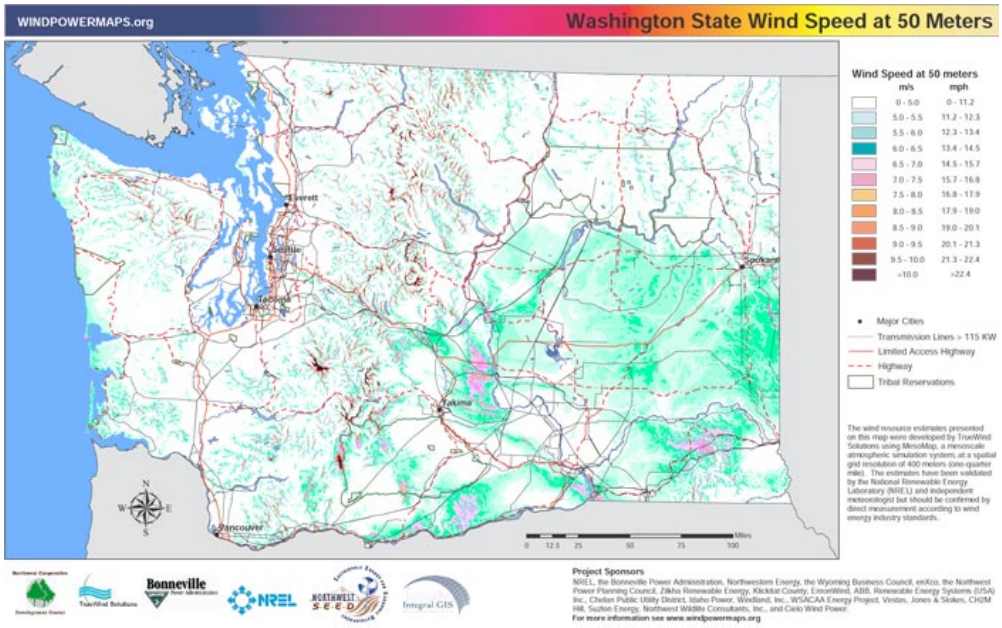
The Department of Energy's Wind Program and the National Renewable Energy Laboratory (NREL) shows wind speed estimates at 50 meters above the ground and grades them for utility-scale wind development. As a renewable resource, wind is classified according to wind power classes, which are based on typical wind speeds. These classes range from Class 1 (the lowest) to Class 7 (the highest). In general, at 50 meters, wind power Class 4 or higher can be useful for generating wind power with large turbines. Class 4 and above are considered good resources.

Figure E-7: Wind Resources at 50 m, Washington State



Source: www.eere.energy.gov

Figure E-8: Wind Speeds at 50m, Washington State



Source: Northwest Sustainable Energy for Economic Development (NWSEED).

Long Beach is categorized as a Class 3 area and has potential to generate higher wind power class values at 80 meters than shown on the 50 meter map because of possible high wind shear. Given the advances in technology, a number of locations in the Class 3 areas may suitable for utility-scale wind development.[1] It is also evident that wind resource potential improves dramatically further away from the mainland.

4.4 Critical Area Ordinance Update Critical Areas Ordinance (CAO) Update

Environmentally sensitive areas such as wetlands, frequently flooded areas, geologically hazardous areas, fish and wildlife habitat conservation areas, and groundwater aquifers are termed "critical areas" under the Washington Growth Management Act or GMA. Critical areas are especially vulnerable to development and its impacts. The GMA requires local governments to protect the natural "functions and values" of these areas. Wetlands are areas that may be either permanently or seasonally inundated by water and comprise the single most significant critical area in Long Beach. Wetlands provide a number of important functions, including fish and wildlife habitat and flood storage. Most wetlands in the City are associated with the city's oceanfront dune system. Development that may impact wetlands or other critical areas is regulated by the City's Critical Areas Ordinance or CAO. The CAO protects wetlands by establishing setbacks and mitigation requirements for new development based on the size and type of the wetland.

Beginning in 2002, every county and city planning under the Growth Management Act (GMA) is required to review and update its comprehensive plan and associated development regulations (including critical area ordinances) every seven years. Deadlines to complete review and updates to the critical areas ordinance vary throughout the state. The deadline for Pacific County and Long Beach is December 1, 2008.

Key requirements for critical area ordinance updates include:

- Utilize "best available science" to protect critical area "functions and values"
- Wetlands must be delineated according to the Washington State Department of Ecology Manual
- Address no net loss of ecological function
- Update critical area inventories by maximizing available information and resources
- Review the CAO and zoning regulations for consistency with other policy and regulatory documents
- Provide opportunities for public and agency involvement throughout the update and adoption process

[1] www.eere.energy.gov; Wind Powering America

4.4.a. WETLANDS

Wetlands are the most predominant critical area in Long Beach. They provide important functions for both the natural and the built environment, including:

- Flood attenuation and stormwater retention
- Erosion protection from wind and storm surges
- Fish and wildlife habitat
- Aquifer recharge
- Water quality protection
- Recreational resource

The Critical Areas Map (Figure A-5 - Development Parameters Map) indicates that the city is bordered on both its east and west by wetland systems. To the west of Ocean Beach Boulevard are scattered small "interdunal" wetlands associated with the coastal dune complex. To the east of the city is a chain of freshwater wetlands that runs through the interior of the peninsula, comprised of a complex and interconnected series of open lakes, sphagnum bogs, mature forested wetlands and large sedge meadows. The wetlands to the east of the city provide some of the most significant wildlife habitat found anywhere on the Long Beach Peninsula. Most of these wetland systems, however, occur outside the city's eastern limits.

The City conducted a wetland inventory of "interdunal" wetlands located between the shoreline and Ocean Beach Boulevard as part of the *Dune Management Report*, prepared in 2000 in collaboration with the Washington Department of Fish and Wildlife, Department of Ecology, US Army Corps of Engineers, and other agencies. That survey indicated the presence of more than 70 acres of wetlands in the coastal dune complex. Most of these wetlands are small—three-quarters of them are less than 0.25 acres in size. The distribution of interdunal wetlands is shown in Figure E-9.

Figure E-9: City of Long Beach Interdunal Wetlands

WETLAND SIZE	NUMBER	PERCENT OF TOTAL	ACRES	PERCENT OF TOTAL
<0.10 Acre	98	52.4%	4.6	6.5%
0.10 to 0.249 Acre	43	23.0%	7.3	10.3%
0.25 to 0.499 Acre	17	9.1%	5.7	8.0%
0.50 to 0.99 Acre	14	7.5%	9.8	13.9%
1.0 Acre to 4.99Acres	13	7.0%	29.0	40.9%
>4.99 Acres	2	1.0%	14.5	20.4%
TOTALS	187	100%	70.9	100%

Source: Dune Management Report, March 2000

These interdunal wetlands are mostly located in shallow sandy swales and contain seasonal standing water, caused by the high groundwater and high rainfall on the coast, which averages 80 inches annually. These wetlands are relatively *small*—only two individual wetlands are larger than five acres in size—*isolated*—they do not comprise an interconnected wetland system like the forested wetland systems in the interior of the peninsula and *young*—having formed in the last fifty years as the seashore accreted and the dune complex grew. For these reasons they tend to provide less value for fish and wildlife habitat compared to the interior wetlands.

More than one-half of the total wetland acreage (36.5 acres) is protected within the Shoreline Conservancy zone. Approximately 19 acres are located within the Shoreline Residential zone and 16 acres are in the Shoreline Rural & Urban Resort zone. A significant portion of the Residential shoreline jurisdiction parcels remain vacant. This may be due to the cost and feasibility of developing these parcels due to the presence of wetlands as well as lack of existing roadway access. However, most of the city's vacant land lies in these areas, so as demand for new homes grows, and given the desirability and amenities of the shoreline properties, development can be expected to increase.

All the City's wetlands are classified as freshwater (not tidal influenced) palustrine systems according to the U.S. Fish and Wildlife Service Wetland Classification System. They are generally grouped into the following wetland classes:

- *Emergent*—wetlands dominated by herbaceous vegetation (i.e., grass or grass-like plants)
- *Emergent/Scrub*—these wetlands are dominated by herbaceous vegetation with small patches of woody plants present

- *Scrub*—wetlands dominated by woody vegetation

The distribution of wetlands according to wetland class is shown in Figure E-10. The single-largest class is scrub wetlands comprising more than one-half of all wetlands.

Figure E-10: City of Long Beach, Wetland Types

WETLAND TYPE	NUMBER	PERCENT OF TOTAL	ACRES	PERCENT OF TOTAL
Emergent	120	64.2%	22.4	31.5%
Emergent-Scrub	15	8.0%	7.8	11.1%
Scrub	52	27.8%	40.7	57.4%
TOTALS	187	100%	70.9	100%

Source: Dune Management Report, March 2000

The City amended its *Shoreline Master Program* (SMP) in 1997, incorporating several recommendations from the *Dune Management Report* related to wetland protection. The City adopted new wetland buffers and wetland impact mitigation procedures. The City's new wetland buffers are shown in Figure E-11. These buffers were recommended by professional biologists from the Washington Department of Fish and Wildlife as well as the Department of Ecology.

Figure E-11: City of Long Beach, Existing Wetland Buffers

WETLAND SIZE	BUFFER	% OF TOTAL WETLAND ACRES
<500 sq. ft.	NO BUFFER REQUIRED	7%
500 sq. ft.- 0.25 acre	25 FEET	10%
0.25 acre and larger	50 FEET	83%

Source: Long Beach Shoreline Master Program

The City also adopted buffer averaging and mitigation sequencing to protect wetlands as well as compensatory mitigation for impacts such as filling or excavation, after implementing mitigation sequencing. Mitigation sequencing is a procedure whereby if wetland alterations are proposed as part of a particular project, the following mitigation sequence should be used to evaluate those proposed wetland alterations:

- Avoid the impact by not taking a certain action or parts of an action;

- Minimize impacts by limiting the degree of magnitude of the action by using appropriate technology, or by taking steps to avoid or reduce impacts;
- Rectify the impact by repairing, rehabilitating or restoring the affected environment;
- Reduce or eliminate the impact over time by maintenance operations during the life of the project;
- Compensate for the impact by replacing or providing substitute resources or environments; and/or
- Monitor the impact and take appropriate corrective measures.

The SMP now prohibits filling or excavating wetlands in the Conservancy and Natural zone, unless needed to maintain or improve existing roads, trails or other structures. Any unavoidable loss of wetland or buffer areas in the Conservancy zone will require compensatory mitigation.

In the Residential and Rural/Urban Resort shoreline zones, no compensatory mitigation is required for impacts to small wetlands less than 500 square feet in size, provided the cumulative wetland impacts (e.g., filling several small wetlands as part of a single project) do not exceed 500 square feet. If the impact exceeds 500 square feet, mitigation will be required[2]. Generally, in the shoreline Residential zone, compensatory mitigation for impacts (filling or excavation) to wetlands 500 sq. ft. in size or larger (individually or cumulatively), is required after mitigation sequencing has been satisfied (at a ratio of 1.5:1). In the shoreline Rural/Urban Resort zone, mitigation may include preserving coastal dune habitat (at a 3:1 ratio) and/or preserving high quality wetlands elsewhere on the Long Beach Peninsula (at a 6:1 ratio). Preservation of wetlands in these cases requires recording of a perpetual conservation easement or transfer of ownership to the city or state. Off-site wetland improvements must be approved by the Washington Department of Ecology (DOE) and the U.S. Army Corps of Engineers.

4.4.b. FREQUENTLY FLOODED AREAS

Flood events in the city are related to winter storm events and combinations of high tides and high groundwater table. Localized

[2] See SMP Regulation 10.21 for detailed description of mitigation/preservation options for property developers. Mitigation requirements are based on the proposed use and/or location of the property relative to particular Seashore Conservation Lines.

flooding is primarily limited to the dune complex, forested wetlands and adjacent areas. See the Critical Areas Map. (Figure A-5)

4.4.c. GEOLOGICALLY HAZARDOUS AREAS

There are no designated geologically hazardous areas in the city such as steep slopes or areas highly susceptible to erosion away from the shoreline. Nevertheless the sandy soils underlying the city may be subject to liquefaction in a severe earthquake. The *Dune Management Report* indicates that the approximate 25' MSL height of the primary seashore dune is likely to protect the city from a "far source" tsunami. However, a near-shore-derived tsunami could inundate the entire city, indeed most of the Long Beach Peninsula. Pacific County emergency management procedures direct evacuation to the low-lying hills directly east of the city to identified upland assembly areas along 67th Place.

4.4.d. FISH AND WILDLIFE HABITAT CONSERVATION AREAS

There are no designated priority, threatened, endangered species habitat within the city according to the Washington Department of Fish and Wildlife.

4.4.e. AQUIFER RECHARGE AREAS

The groundwater aquifer underlying the city is a relatively shallow unconfined aquifer subject to saltwater intrusion. The city relies on surface water sources for its potable water supplies, so groundwater is not a potable water source for city residents. However, residents in some surrounding unincorporated areas do depend upon groundwater for some of their water supply, so protection of the aquifer remains important.

4.5 Shoreline Master Program (SMP) Update

The oceanfront shoreline along the City's western border is part of a coastal dune system that provides important ecological functions and values as well as being an integral part of the city's economy. This area is designated by the State's Shoreline Management Act (SMA) as a "shoreline of state-wide significance". Development along the oceanfront is managed by the City's Shoreline Master Program or SMP. The SMP is essentially a land use plan and zoning code specifically for the shorelines. The SMP regulates setbacks for new development from the shoreline as well as the density, intensity and types of uses allowed there.

The City is experiencing increasing residential growth as well as an expanding tourism-based economy. The City must balance the demand for future growth as required by the GMA while still protecting the coastal dunes as required by the SMA.

The Shoreline Management Act (SMA) charges the Washington State Department of Ecology (DOE) with the task of preparing guidelines for local jurisdiction

implementation of the SMA. The Shoreline Master Program Guidelines provide standards and guidance that local governments must follow in drafting their local Shoreline Master Programs (SMPs). In December 2003, DOE adopted new, revised SMP Guidelines. Local governments are required to review and update their existing Shoreline Master Programs consistent with the new DOE guidelines. Key objectives of the new DOE Shoreline Guidelines that must be considered include:

- Restoration of impaired shoreline "function" through comprehensive planning and voluntary implementation
- No net loss of ecological function
- Management of critical saltwater habitats
- Protection of archaeological and historic resources
- Critical Areas and flood hazard reduction
- Public access to shorelines
- Shoreline vegetation conservation
- Water quality, stormwater and non-point pollution

4.5.a. GENERALIZED REQUIREMENTS FOR THE SMP UPDATE

- Provide opportunities for public involvement (e.g., workshops, hearings, etc.)
- Inventory and characterize the shoreline landscape by maximizing use of available information and resources
- Integrate shoreline policies and regulations with parallel planning efforts and development regulations
- Identify and document ecological "functions and values" of shorelines
- Coordinate shoreline restoration planning with current restoration programs and efforts (e.g., Dune Management Report)
- Evaluate and update shoreline designations, policies and development standards
- Conduct a cumulative impact analysis of potential affects to shoreline ecological functions based on future growth projections and predicted development demands

The City's comprehensive SMP update (under the new guidelines) must be completed by 2014. DOE provides funding for comprehensive updates consistent with the new guidelines. However, since the city is conducting a comprehensive (GMA) plan update now, it—by necessity—needs to consider shoreline and SMP issues as part of that planning process. The full SMP update—consistent with the new

guidelines—requires a more significant effort, including an updated inventory and analysis of shoreline ecological functions, human-induced impacts and shoreline restoration activities and programs. That work will be completed closer to the 2014 deadline and with DOE-funded assistance. However, jurisdictions may make interim or "less than comprehensive" amendments to their SMP's prior to their scheduled due dates for full compliance with the new guidelines. However, significant changes (as determined by the DOE) to the SMP anticipated by a jurisdiction prior to its scheduled SMP update compliance date (in the case of Long Beach, 2014) may trigger the requirement for a "comprehensive" update under the SMA—meaning that the city must fully comply with all the new guidelines, now. For Long Beach, shoreline planning is closely integrated to (and often inseparable from) its long-range GMA planning requirements. Depending upon the type and nature of changes contemplated by the comprehensive plan update, the SMP may need to be modified to maintain consistency with GMA/SMA planning requirements. But such changes should be limited to strengthening policies and regulations or other streamlining or comprehensive plan consistency revisions so as not to trigger the "comprehensive " SMP Update requirement significantly in advance of the 2014 due date.

The city identified consistency issues between the SMP, the comprehensive plan update and the city's adopted development regulations to ensure that any proposed SMP amendments that arose out of the planning process fell within the "less than comprehensive" category of amendments envisioned by the DOE. Potential revisions to the SMP addressed during the planning process that appear to meet the "limited" SMP amendment criteria include:

- Updating the SMP to clarify policy language that allows for existing platted roads to be improved in the conservancy designation
- Extending coverage of SMP wetland policy and regulatory protection to affected but un-mapped SMA-jurisdictional wetlands east of the city which are within the City's jurisdiction
- Revise SMP shoreline use regulations and policies, as applicable, to maintain consistency with adopted city policy and "upland" zoning regulations and designations; and
- Monitoring the continued research in the Southwest Washington Coastal Erosion Study (SWCES) and coordinate with affected state and federal agencies to ensure adequate seashore protection for Long Beach

4.5.b. SHORELINE FEATURES

According to records from the state of Washington, from 1889 to 2000, the city's shoreline has grown westward by approximately 2,000 feet due to accretion. This is the result of sand being transported in the "littoral cell" or current that is deposited along the shoreline of the Long Beach Peninsula. In general the littoral current runs northerly in the summer months and reverses course in the winter. Over the past fifty years, the rate of accretion has averaged between 20-30 feet annually. This rare process has increased the city's size significantly but also presents a challenge to manage the expanding seashore in a manner that protects its natural functions and values under the SMA.

European Beach grass was introduced in the 1930s to stabilize the blowing dunes along the peninsula. Combined with the accretion process and steady supply of new sand, a coastal dune complex has evolved that is unique to the state. Today that shoreline is characterized as a dune and swale landscape. The character of the dune complex is shaped and influenced by wind, water, vegetation and availability of sand.

The landscape is characterized by several distinct seashore landforms:

- ***Fore or Primary Dune*** (the highest and first dune off the beach; up to 25' above mean sea level; it traps the most and largest sand particles)
- ***Swale Depressions*** (on the back-side of the dunes; subject to lower wind velocity where sediment transport diminishes; high rainfall and high groundwater result in seasonal wetlands)
- ***Back Dunes or Hummocks*** (smaller dunes than the primary dune as wind velocity diminishes further away from the shore and less sand is wind-borne)
- ***Deflation Plains*** (farthest away from the shore; wind diminishes to a point that sediment transport ceases; colonized by scrub wetlands, shore pines and other upland vegetation)

The seashore/dune complex provides important natural as well as economic functions and values, including:

- Fish and wildlife habitat (the fore dune and beach environments provide the most significant wildlife habitats within the larger coastal dune complex)
- Groundwater recharge (porous sandy soil and lack of pervious surfaces allows for rapid groundwater recharge)
- Water quality protection (filters and traps contaminants that could pollute the groundwater aquifer)

- Stormwater retention (absorbs and retains stormwater runoff that might otherwise contribute to localized flooding)
- Storm surge buffers (the primary dune and smaller back dunes provides buffers to absorb storm surges; elevation of the primary dune generally exceeds the elevation of winter storm surges and "far source" tsunamis)
- Erosion protection (acts as a buffer to wind and wave energy-induced erosion)
- Recreation (provides the most significant source of tourism and economic development generated incomes on the Long Beach Peninsula); and
- Aesthetics (the beach and dunes provide natural open space for residents and visitors)

The beach and coastal dunes provide a high value complex ecosystem. Preserving the integrity of this ecosystem should be the key consideration in shoreline planning and management. Indeed, the natural forces that shaped the peninsula are ever-changing. It is not a static place. Recent data from the DOE suggests that the seashore accretion process may have ended and acute erosion or loss of shoreline has been experienced in the last several years on the peninsula. The Washington DOE, in cooperation with the U.S. Geological Survey and the U.S. Army Corps of Engineers, is continuing to study the longshore transport of sediment along the southwest Washington coast. This research is referred to as the Southwest Washington Coastal Erosion Study (SWCES). The SWCES will help to explain the complex natural roles and processes of currents, wind patterns, wave energy, and sediment loading along the coast, including assessment of the human-induced impacts on these processes.

Research to date indicates several important findings from the SWCES. Chief among these is that the supply of sand from the mouth of the Columbia River that feeds the beaches of the Long Beach Peninsula has diminished significantly since construction of the upriver dams. The dams effectively reduce the supply of natural sediments transported by the river to its ocean mouth. This has been offset to some extent by active dredging of the Columbia River ship channel. Sand and sediments are dredged to maintain a deep-water channel for trans-oceanic shipping. However, dredged sand supplies are not sustainable and cannot replace the volume of sand formerly deposited at the mouth of the river.

The SWCES notes that "…[a]s the sand supply to the Long Beach Peninsula declines, the southern portion of the peninsula is predicted to undergo net shoreline recession. The coast cannot maintain its existing configuration without the continued supply of sand….The SWCES beach morphology monitoring program has in fact revealed net shoreline recession along the southern Long Beach Peninsula since the program began in 1997…net shoreline retreat along the southern Long Beach peninsula [is] inevitable in the coming decades."

Depending upon the future rate of sand supply and sand replenishment strategies, the SWCES predicts that the City of Long Beach could lose up to a quarter or more of its accreted shoreline within the next 50 years. The City will continue to coordinate with the DOE and Pacific County to undertake continuing studies and develop sustainable sand replenishment strategies for the Long Beach Peninsula.

4.5.c. EXISTING SHORELINE MASTER PROGRAM LAND USE PLAN

There are three primary shoreline environment designations that apply to the city's shoreline jurisdiction: Conservancy, Residential and Resort (Rural & Urban). See the Shoreline Zoning Map.

Conservancy — This designation applies to natural areas deemed not suitable for urban development. No residential or commercial development is allowed. Allowed development is limited to public access and public facilities. The Conservancy environment is the largest land use designation in the city's shoreline environment. It comprises approximately 226 acres of all lands within the shoreline jurisdiction. More than half of the interdunal wetlands are protected in this category. Note that the Natural shoreline designation applies to the primary dune and westward to include the beach and the near-shore ocean environs.

Residential — This designation allows for single and multi-family development, including condominiums. No commercial development is allowed. Residential designation applies to 144 acres of shorelands in the city. The maximum building height is 35 feet. The Shoreline Zoning Map designates areas within this zone for either single family development (S1) or multi-family development and condos (S2).

Rural & Urban Resort — These designations allow the most intense development within the shoreline jurisdiction. Together, they comprise 95 acres of shorelands in the city. Allowed uses include hotels, resorts, commercial activities and condominiums. The maximum building height is 55 feet. The six-block Urban Resort zone (between 5th Street S. and 11th Street S.) is the area currently planned to accommodate the most significant amount of future tourism-oriented accommodations and related commercial development in the city.

The boundaries of these designations are affected by the various seashore conservation lines. The Seashore Conservation Lines (SCLs) are survey lines that delineated the actual shoreline as determined by the state of Washington at particular points in time. The shoreline accretion activity over the past 100 years (and especially within the past fifty years) resulted in movement of the seashore conservation line steadily westward. There are several historic conservations lines now documented, including the original 1889 Government Line, the 1968 SCL, the 1980 SCL and the 1990 SCL.

The Dune Management Report (March 2000) predicted development impacts from buildout of the shoreline under the current adopted SMP. The results of this analysis are shown in Figure E-12.

Figure E-12: City of Long Beach, Shoreline Jurisdiction Buildout Analysis

SHORELINE DESIGNATION	TOTAL ACRES	MAX. LOTS	BUILT ENVIRONMENT % COVERAGE	BUILT ENVNT ACRES	UN-BUILT ACRES	WETLAND ACRES	BUFFER ACRES
Single family (S1) + Multi-family (S2) Residential	144	626	60%	86.4	57.6	18.7	18
Shoreline Rural & Urban Resort	95	413	75%	71.3	81.4	16	17
Shoreline Conservancy	226	NA	NA	NA	226	34.4	NA
TOTALS	465	1,039		157.7	365	69.1	35

Note: Maximum number of lots in the Residential and Urban Resort zone based on average 10,000 sq.ft. lot size.

Source: Dune Management Report, March 2000

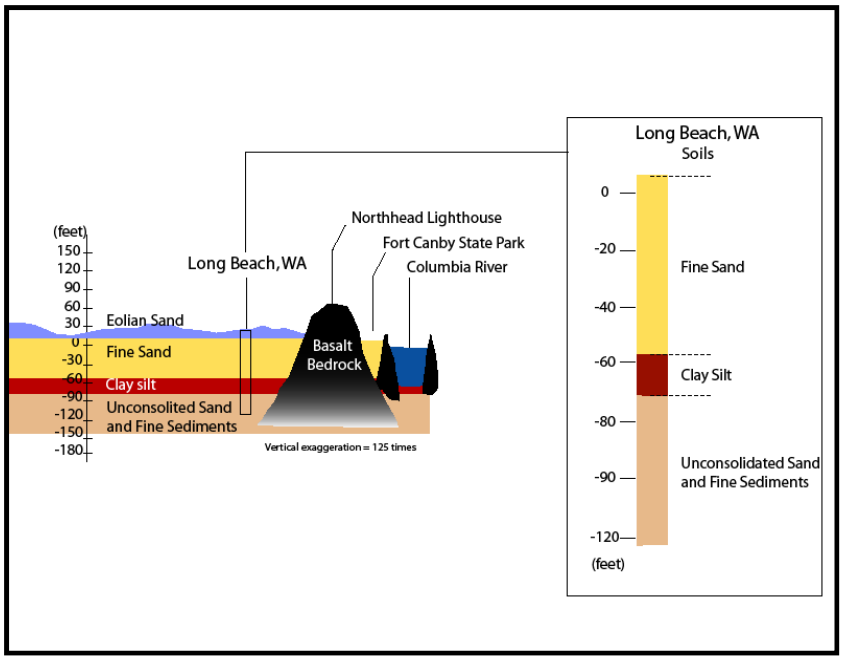
The report indicated that based on current trends of increasing multi-family and condominium development and current adopted development regulations, at maximum build-out, approximately 1,039 lots with built structures (including buildings, driveways, parking, etc.) covering 158 acres could be built. An additional 20 acres of new roads would be constructed, for a total of 178 acres of built land.

4.6 Groundwater Level[3]

The groundwater system of Long Beach consists of a sand aquifer with some lenses of silt and clay that may act as confining beds in local areas (USGS, 1995). Average annual groundwater recharge by infiltration and percolation of precipitation is estimated at 58 inches. Groundwater generally moves perpendicular to the spine of the Peninsula along the north-south line. Groundwater flows east or west from this line. Levels may fluctuate seasonally due to variation in recharge and discharge. The median depth to water from the surface of the land was 1.5 feet and median maximum depth is 8.7 feet.

4.7 Soil and Geology[4] [5]

The Willapa Barrier consists of well sorted fine-grained sand, and averages 23 mi long by 2 mi wide by 50 – 75 feet deep. The Holocene sand rests on a thin platform of clayey silt (9-15 feet deep). The bed rock is more than 1500 feet deep in most places, though it is closer to the surface near Cape Disappointment Park. Adjacent to the beach area is a region of dunes composed of an active shoreline dune, a stabilized inshore dune, and an interdune area separating the two. The interdune region is relatively wide and level, and maintains a water table at or near the surface during the rainy season. The stabilized inshore dune forms a ridge of higher elevation, up to 25 feet in the Long Beach area, and may have slopes up to 10%.



Soils in the active shoreline dune area are generally loose and excessively drained. The area defined by the interdune and the stabilized inshore dune areas and eastward as far as SR 103 has the Westport fine sand variety soils. This soil has moderate

[3] Stormwater Management Plan (1998) Gray and Osborne Inc. (page 2-6)
[4] Stormwater Management Plan (1998) Gray and Osborne Inc. (pgs 2-4 to 2-5)
[5] Soil Survey of Grays Harbor County and Pacific County of Washington (1979) USDA Soil Conservation Survey.

3-10% slopes. It runs a slight risk of erosion by runoff but a high risk of erosion due to wind.

Source: Journal of Sedimentary Research, Vol. 69, No. 6, November 1999.

East of Ocean Beach Boulevard and beyond the city's eastern limits are deposits of Netarts fine sand interspersed with Yaquina loamy fine sand. The deep, well-drained Netarts sand is typically found on the higher elevations and slopes of greater than 3%. On the other hand, the somewhat poorly drained Yaquina soils lie typically in the interstitial depressions. These soils remain saturated for most of the year. The water table through the winter months is generally at 0-2 feet east of Pacific Avenue and in dune lands which are both non-hydric.

There are concentrations of other hydric soils such as Seastrand Mucky Peat Sand and Seastrand Variant Muck. A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. When soils thus become saturated with water due to rainfall and flooding, gas diffusion in soil slows (some 10,000 times slower) because there are no open passageways for air to travel. When oxygen levels become limited, intense competition arises between soil life forms for the remaining oxygen. When this anaerobic environment continues for long periods during the growing season, the biological and chemical reactions that begin to dominate differ from those in aerobic soils. In soils where saturation with water is prolonged and is repeated for many years, unique soil properties usually develop that can be recognized in the field. Such hydric soils may occupy a relatively small portion of the landscape, but they maintain important functions in the environment.[6]

The engineering properties of the above soil types are listed in the Soil Survey by USDA and should be referenced for any structural or permeability considerations for building codes or street standards.

4.8 Noise Pollution

Noise pollution in Long Beach is not a frequent issue. Noise pollution, when it is reported in Long Beach is generally related to commercial establishments that stay open late or to seasonal rentals of single family homes or condominiums. The beach too can be noisy when large or loud vehicles use the stretch for driving. Overall, unlike many other tourist destinations, Long Beach has not experienced systemic noise pollution and as such does not have any methods to record noise levels.

[6] This definition (Federal Register, July 13, 1994) replaced the older 1991 version and accomplished two things. First, a soil that is artificially drained or protected (ditches, levees, etc.) is a hydric soil if the soil in its undisturbed state meets the definition of a hydric soil. Estimated soil properties for manipulated soils are based on best professional estimates of the properties thought to exist before manipulation. Second, the link between the definition and criteria was removed. Source: en.wikipedia.org

4.9 Light Pollution

Studies have shown that inappropriate outdoor light fixtures on private property as well as the public right-of-way are not only a waste of energy but also negatively impacts the natural environment, and some contend, human health. Long Beach does not have a night-sky ordinance. The pronounced instance of light pollution is evident on the Beach is caused by several large adjacent developments. There is also light spillover in the Old Town area along Pacific Avenue. The rest of the town is fairly dark after sunset.

4.10 Summary of Issues

Long Beach is surrounded by fairly native and undisturbed ecology. However, as it continues to grow it will need to keep an eye on currently minor development impacts that may be amplified with increasing amount of development and human activities. Like many other communities located in such scenic settings, Long Beach's economy is closely related to the health of its natural landscape. Therefore the importance of balancing development needs with environmental limitations will be additionally critical to the city. Dune landscapes are integrated over miles and shift with the wind and storm surges. Therefore development approaches to the city must be cognizant of leaving long stretches of undisturbed dune ecology rather than only protecting small pockets. Current concerns regarding global warming and related phenomenon of rising sea levels and more powerful storm surges could affect Long Beach, as could the potential erosion of beach sand, should efforts to stop it fail.

5. PARKS, OPEN SPACE AND RECREATION

A Parks, Open Space and Recreation Plan (POSR) is a strategic way for a community to envision an outstanding future for its natural and recreational resources. In a setting as environmentally rich as Long Beach, it is an opportunity to recognize the natural setting and ecological dynamics that set your City apart from others. These environmental qualities enriched by quality recreational programming, parks and facilities that serve the community, and public policies that support your community goals are the backbone of your Plan.

In Washington State, the legislature in 2002 added a mandatory Parks and Recreation Element to the existing Growth Management Act. As with the initial GMA goals the intention is to maintain, or improve the area's quality of life as your community grows. The GMA goals state that Washington Communities should:

- Retain open space
- Enhance recreational opportunities
- Conserve fish and wildlife habitat
- Increase access to natural resource lands and water
- develop parks and recreational facilities

The Long Beach POSR Plan of 2007 is being developed along with the Long Beach Comprehensive Plan and as such is intended to be consistent with the Capital Facilities, Land Use, and Critical Areas Protections that are developed in that larger planning document. Our recommendations contained in this plan reflect our analysis of the growth trends and service needs of the City of Long Beach.

As the first formal POSR Plan for the city of Long Beach, this is a greenprint to embark upon a course of action that will connect existing and future parks and habitat in a way that help define the city as an ecologically sound community. A city that provides its citizens and visitors with an exemplary recreational experience is a rare Pacific coastal environment.

5.1 Community Context

When considering the development of a Long Beach Parks and Recreation system there is the need to consider a broader set of conditions that establish its context. This section will summarize key conditions and look at some implication and responses to those conditions.

5.1.a. LOCATION

The City of Long Beach's physical geography is part of one the Pacific Northwest's most dynamic shorelines. Formed over eons from the outfall of the mighty Columbia River the Long Beach Peninsula reaches northward from the rock formations and jetty's of Cape Disappointment over 20 miles to the horn of Leadbetter Point. This

long and narrow peninsula which connects at its southern base to the mainland creates the inner southern arc of the Willapa Bay.

The dynamic nature of the peninsula is starkly highlighted by the accretion over the last 40 years of a half mile of westward land at Long Beach which has created a new shore dunes and emergent wetland habitat. The layers of historical dunes running north-south has also formed complementary wetlands in their interstitial areas.

Long Beach is part of the extreme Southwest corner of the State of Washington in Pacific County. It is a sparsely populated area off of the more populated I 5 corridor 112 miles west-northwest of Portland OR, and 171 miles south-southwest of Seattle, WA.

5.1.b. PLANNING IMPLICATIONS:

Long Beach has always been a destination point, from the original Shoalwater indigenous population, through the Lewis and Clark expedition, to its evolution as a resort community. Being outside of the I5 economic belt the local economy has been driven by seasonal fluctuations with the cranberry agricultural economy providing one steady element. It is a community that attracts visitors due to its edge relationship to the Pacific Ocean and the Columbia River.

As a low lying land form with a causal relationship to the outfall of the Columbia it is vulnerable to coastal change, extreme weather and sea level change. Habitat conservation zones are vulnerable to these changes, as could be the developments associated with the City including its parks and recreation elements.

5.2 Historic Perspective

Long Beach has a rich story from the first peoples now known as Shoalwater, through the oceanic "Northwest Passage" explorations (1978 – 92), to the terrestrial explorations of Lewis and Clark (1805). The City of Long Beach evolved from a series of resort developments started as early as the 1850's.

The development of the Peninsula over time brought a railroad, and wetland development into a significant cranberry agriculture. The City has developed as the largest local incorporated area and become the primary commercial resort area of the region.

5.2.a. PLANNING IMPLICATIONS

With an important national and regional story to tell Long Beach has embraced the "Discovery" period and there are many more potential elements which could be added. The City could develop an inventory and master plan in collaboration with existing organizations. The conservation, and restoration of existing building and locations of

historic significance such as the railroad line could offer both contemporary and vintage amenities.

5.3 Physical Development Pattern

The series of dunes formed from the northern mouth of the Columbia River has shaped a striated terrain of north-south remnant dunes with emergent wetlands between. Pacific Avenue took the primary dune highpoint to establish a main road. The city block system has stretched along this axis filling in the available and filled land first to the east, and then to the west with the shore accretion. These natural boundaries have created an elongated City with two strong cross roads created by wetland crossings at the Syd Snyder Road, and Pioneer Roads.

5.3.a. PLANNING IMPLICATIONS

There is a pattern of resort development west of Pacific Avenue, and residential, and seasonal residency east of Pacific. These have both been relatively low-density, but recent economic activity in the resort areas suggests increased tourist use densities. Movement by car is becoming congested in tourist season along Pacific with residents choosing to use the three other north-south streets for in-city movement.

There is an opportunity to activate the eastern side of town for interpretive recreational uses by connecting into the eastern wetland complex, and locating neighborhood parks in the NE and SE City corners. The existing Parks facilities are congregated in the center of the City.

5.4 Existing Parks and Recreation Resources

This chapter identifies and discusses the inventory of existing parks and recreation resources in the City of Long Beach. The City of Long Beach currently owns 7 park properties ranging in size from little more than one-twentieth of an acre to more than 60 acres. The City also has created and maintains the **8.2** mile Discovery Trail. The City portfolio consists of **125.89** acres of parkland.

For future planning purposes this chapter will categorize the existing parks and recreation resources into four general categories: **Neighborhood Parks** including mini-parks, **Special Use Parks, Open Space and Conservancy Lands**, and **Linear Trails**. Although a resource may have features from more than one category, most facilities fall into one general category based on size and service area, primary uses, or public access. These categories will allow the City to identify quality of service to its citizens based on a geographical basis. The categories are based upon the National Recreation and Parks Association system and is a sound basis for determining needs and future park resource distribution.

Long Beach has acquired parkland in a variety of ways. Like most City's with a long history and incorporated in 1922, parks have come from outright purchases, donations, and land transfers. The development of the parks has also come from a

variety of sources, but primarily from the citizens, social organizations and the City in cooperation. The Open Space Conservancy properties transferred from Washington State Parks have had limited development but do include the Boardwalk and the Discovery Trail.

5.4.a. NEIGHBORHOOD PARKS

Neighborhood parks are the anchor of a park system and serve as the recreational and social focus of the neighborhood. They should be developed for both active and passive recreation activities geared specifically for those living within a reasonable access radius by walking or biking. A typical distance is 1/2 to 1/4 mile radius. Whether to provide restrooms is determined based on each parks primary uses and local needs. Accommodating a wide variety of age and user groups including children, adults, the elderly and special populations are important. Neighborhood parks usually have a combination of playground and park designed for non-organized recreation activities such as playground, picnic area, open space play area, outdoor sport courts, multi-purpose sport fields, and local trail and habitat elements. The ideal size depends on the particular characteristics of the site and local needs and users. A typical park may be from 1 to 10 acres or more.

Some parks identified in this category are much smaller than the desirable size for a neighborhood park and usually respond to a particular need or opportunity. These **mini-parks** can be part of a retail or dense urban area, fit into a small site that satisfies a narrow set of needs such as a small lot with play equipment, a historic location, or a small habitat interpretive opportunity for example.

Culbertson Park (12.6 acre) and Stanley Park (1.26 acre) would fit into the neighborhood park category as multi-purpose sites with the larger scale and the variety of uses they have been developed to support. The two remaining mini-parks are the 3rd and 5th St. South and Pacific Highway West corner parks (.46 acre). Created as part of an urban improvement and economic development effort the small corner parks sites serve as civic gathering locations for both tourists and residents. They celebrate local history, and art. and provide police services and public restrooms. Long Beach has **14.32** acres of neighborhood parks.

5.4.b. SPECIAL USE PARKS

Special use facilities are single purpose recreational and civic elements like nature centers, golf courses, zoos, conservatories, historic buildings, outdoor theaters, skate parks, swimming pools and interpretive centers. Special use facilities may include areas the preserve, maintain and interpret buildings, sites and other objects of historical or cultural significance.

Coulter Park (.03 acre) is a civic amenity that provides a location for public meetings in a relocated historic railroad depot building and a small green. It is newly constituted and its uses are just beginning to emerge. Long Beach has **0.03** acres of special use parks.

5.4.c. Open Space and Conservancy Lands

These unique parks are natural resource lands set aside for preservation of significant natural resources, remnant landscapes, open space areas for visual aesthetics and natural buffering. These parklands are typically characterized by significant natural vegetation and landforms, wildlife habitat, drainage ways, wetlands and surface water management areas.

Resource and open space lands are areas of natural quality for passive use or nature oriented outdoor recreation, education and interpretation. Recreational uses are often secondary to resource conservation but can include interpretive trails, viewpoints, bridges, and picnic areas. Educational uses can also include site sensitive design of interpretive buildings and public amenities including restrooms.

Because of its unique beach accretion and its relationship to the Long Beach Peninsula shoreline and its place as a regional recreation location has accepted title transfer from the Washington State Parks of two significant conservancy properties. The Open Space and conservancy Lands contain 111. 54 acres. The South Conservancy Area (51.48 acres) and the North Conservancy Area (60.06 acres) are lands with significant emergent wetlands and native and non-native vegetation in a strategic public location reaching to the year 2000 shoreline designation.

In addition on the City's west side there are 8 similar but narrow parcels still in State Park ownership that act as de facto conservancy parcels. To the east the City boundary is formed by a major inter-dunal wetland complex that is designated as a critical area wetland and agricultural areas in Pacific County. The ground reality is that these resource lands serve as an additional open space edge or boundary to the City of Long Beach and have as yet not been activated for their interpretive habitat and recreational potential.

Long Beach has existing Open Space and Conservancy Lands of **111.54** acres.

5.4.d. Linear Trails

Linear trails are often based on natural corridors, such as abandoned railroad lines, active utility rights of way, and natural drainage patterns. Long Beach has the two prominent north-south physical features – the shoreline and the inter-dunal wetlands that could be

linked by east-west trails keyed to pedestrian friendly streets and other park, commercial and civic amenities.

The City of Long Beach has partnered with the State and other local governments to develop the first phase of the long-desired Discovery Trail celebrating the explorations of Lewis and Clark and the natural splendor of the Long Beach Peninsula. The 8.2 mile trail extends from 26th Street N. in Long Beach southward through the dunes, through Seaview to Cape Disappointment State Park, and ends at Main Street in Ilwaco.

Parallel to a portion of the Discovery Trail is an elevated boardwalk that stretches for 0.4 miles. Adding this to the existing Discovery Trail of 8.2 mi. there is **8.6 mi.** of linear trail in Long Beach.

Figure E-13: Summary of Parks, Open Space and Recreation Resources

NEIGHBORHOOD PARKS	AREA	DESCRIPTION/CURRENT USE
Culbertson Park	548,800 SQ. FT. OR 12.6 ACRE	children's play area, softball field (1), baseball fields (2 – leased 30,000 sq. ft.), tennis court (1), concession stand, skateboard area, bathroom ?
Stanley Park	55, 000 SQ. FT. OR 1.26 ACRE	Softball field (1), batting cage, concession stand, public bathroom
5th St. S. Mini Parks	11,700 SQ. FT. OR .27 ACRE	Four corner lots along Pacific Ave. W. providing an urban square; a fountain, Lewis and Clark interpretive exhibit, public bathrooms
3rd St. S. Mini Parks	8,100 SQ. FT. OR .19 ACRE	Three corner lots along Pacific Ave. W. (the fourth is the Long Beach Police Dept.)
SPECIAL USE PARKS	**AREA**	**DESCRIPTION/CURRENT USE**
Coulter Park	1,500 SQ. FT. OR .03 ACRES	Relocated historic train depot used as a public meeting area. A small green with flagpole.
OPEN SPACE AND CONSERVANCY LANDS	**AREA**	**DESCRIPTION/CURRENT USE**
South Conservancy Area	2,242,302 SQ. FT. OR 51.48 ACRES	Former Washington State Parks land from 4th St. S. to 4th St. N. west of the Old Town West District to the 2000 shoreline designation; dune accretion area with dunegrass/ shorepine habitat and a mosaic of social trails and seasonal wetlands.
North Conservancy Area	2,616,322 SQ. FT. OR 60.06 ACRES	Former Washington State Park land from 8th St. N. to 14th St. N. west of restricted single family zoning to the 2000 shoreline designation; dune accretion area with dunegrass/shorepine habitat and a mosaic of social trails and seasonal wetlands.
"Piano Key" Conservancy Parcels	NOT YET CONVEYED	8 narrow parcels of WSP land that lie in the dune accretion area.
LINEAR TRAILS AND INTERPRETIVE SITES	**AREA**	**DESCRIPTION/CURRENT USE**
Discovery Trail (formerly the Dune Trail)	8.6 MI. (2.5 MI. IN CITY OF LONG BEACH)	A meandering 10' wide asphalt surface coastal dune trail from 26th St. N. near the north City boundary heading south: extends southward through Seaview to Beards Hollow and ends in Ilwaco. Two segments totaling 2.76 miles (30th St. in Seaview to Beards Hollow and Beards Hollow to Ilwaco) are constructed but not paved. Includes a bronze heritage Lewis and Clark "tree" interpretive site and other natural and historical interpretive materials.
Long Beach Boardwalk	2,200 FT. OR .4 MI.	A 10' wide elevated wood boardwalk in the active dune area. A series of interpretive signage and a whale bones exhibit.

5.5 Community Needs and Visioning

A series of broad public vision planning workshops were held to integrate the POSR plan with the other elements of the Comprehensive Plan. These are summarized in Section C of this Appendix.

POSR Survey: In addition to the above community meetings, the community was surveyed at a public meeting, and subsequently the survey was distributed to a broader range of citizens including school aged citizens. A total of 181 surveys were completed and tallied with results.

The results showed a strong desire to connect the communities natural and parks resources by a safe trail/pedestrian system. Access to water, both natural and in a public facility were also noted. This was often linked with an interest in a multi-purpose Community Center and increased recreational and cultural programming.

Note: The complete record of the POSR community outreach experience is documented in the Appendix.

The following are topics were presented and discussed at the February 6, 2007 public meeting.

Level of Service Standards (LOS) – are a required component of meeting the Washington Growth Management Act standards. Long Beach is in the envious situation of having a large amount of existing park and open space within the City. There are 14.32 Acres of Neighborhood Parks in Long Beach while having a population of near 1,400 gives a ratio of over 1 Acre/100 residents. Similarly the Habitat Conservation Parks provide 111.54 Acres of open space, far beyond a common LOS standard of 1 acre/100 persons.

A normal LOS standard for Neighborhood Parks for a lower density City is to have a park within 1/2 mile of all residents. Many communities also want a park within every arterial quadrant, which intends to create a safe pedestrian path for children and elders – not causing them to cross a busy street. Our proposal looks at the north and south ends of the Long Beach as "underserved" according to these criteria. (See the POSR map for a graphic analysis of the underserved area)

The following questions were discussed:

- Do you agree that Long Beach should have a Neighborhood Park within 1/2 mile of all citizens as a goal?
- Should there be parks on each side of Pacific Highway according to the 1/2 mile criteria?

"Need Based" New Parks/Opportunity Sites – the Level of Service standard discussed above for Neighborhood Parks can be shown in a visual analysis for the north and south ends of the City. One of the POSR strategies might prioritize placing parks in these areas and for our "draft recommendations" we have identified existing vacant parcels there.

These are hypothetical new park sites and it is common practice in a Parks Acquisition strategy to not identify specific sites, but to rather look for "opportunity sites" within the need area.

- Should your POSR Plan identify specific sites, or would it be better to use the opportunity site strategy?
- Do you have idea's about a park site within these areas?
- Should these new parks focus on very young children and elders?

5.6 View Protection In Long Beach

The Long Beach community wants to conserve the unique visual quality of their historic coastal location. Through our public planning process the clear intention is that there are specific conditions that require protection:

- Natural views towards the ocean habitat. This includes the grand vista's at the two main historic access points (Syd Snyder Dr. and Bolstad Avenue/1st St. SW), and all the public street ends that lead to the shoreline dunes and wetlands leading to the shore.
- Natural views towards the eastern wetland complex at the public street ends and from roadways that transect the wetlands.
- Views from the public ROW of identified historic structures and interpretive elements meant for visual display. Examples of this would be the relocated historic depot and the cranberry mural on the south wall of the 2nd St NW Hardware.
- Unique community "treasures" that represent community character. An example of this might be the "aerial art" in the front yard of a historic cabin Long Ocean Beach Boulevard S.

View Protection Policies – are usually created to conserve unobstructed views of natural features or historical civic "amenities" from public land such as public rights-of-way (ROW). Attempts to conserve views from private land have been attempted but there is "legal uncertainty" that such a policy can be based solely on "aesthetic considerations". It seems to be necessary to also have health, safety or welfare issues present to limit building heights, vegetation or utility line placement with the intention of preserving a view from private property.

At the February 6, 2007 public meeting focused on the Parks Plan we presented a series of questions as a means of beginning to identify the specific locations and characteristics that lead to our four priority areas listed above. The following questions were the basis of our discussion:

In Long Beach we need to understand what views the community wants to conserve, and also to what priority they place on visual restrictions to common commercial elements such as lighted signage.

- What views to the sea should be protected? Does the height of the active dune obscure the view, or is it part of the view sequence?
- What historical buildings deserve to have the public view conserved?
- Are there other natural or unique "elements" that should be considered?

5.7 Cultural Heritage Planning for Long Beach

Long Beach has a long story and ardent local historical interest in its diverse past and its dynamic future. It is a community that values and promotes its cultural and historic assets.

Cultural Heritage Planning – is a relatively new policy element in comprehensive planning. They are commonly used to define a variety of community aspects that are valued highly and deserve protection or emphasis. They can create a programmatic way to conserve these resources, inform the public about them, or link them via a physical path or an electronic web site. They can be an important basis of a market plan for increasing tourist revenue.

In Long Beach there are some clear subjects to be considered such as: the Long Beach peninsula natural history, first peoples history and culture, the age of Northwest Coast exploration, the Peninsula railroad, cranberries, city history, kites, beach driving, and manilla clams. There may be more historically, there will be more in the future.

Another set of questions were presented to the public at the February 7, 2007 Parks Planning meeting:

- What should be included in the Cultural Heritage Plan?
- What should be accomplished with the plan? (within budget)
- What role will community volunteers play? Who are the natural stewards of the Cultural Heritage Plan?

The response was limited in specific suggestions but it was noted that there is a Long Beach Peninsula tourism web-site that has established itself as a resource to identify and protect the existing cultural heritage. The Long Beach comprehensive plan and future policy should work very closely with this resource.

5.8 Summary

It is clear that developing parks and enhancing natural areas for recreational and educational purposes is an important priority for Long Beach residents. The beach offers an expansive area for recreational purposes, but the wind speeds and the wet winter months limit the amount the beach can be used, as well as the activities that can be hosted there. Therefore, the city needs to view park planning for neighborhood purposes in addition to protecting the beach and shoreline areas. The city also needs to identify opportunities for creative park design and planning that can leverage its tourism focused economy, particularly in the downtown area. Residents also want to linkg park and other destinations through enhanced trail and green street connections.

6. MARKET OVERVIEW

This analysis explores the present and future markets for development and redevelopment in the Long Beach area. This process includes:

- A review of the population and demographics of the area;
- An estimate of the number of households and their incomes to determine the purchasing power of the area;
- An overview of the housing market
- An overview of the employment outlook to determine the demand of office space in the area

6.1 Growth in the Region

There are two components of population change in any area: the natural change and the migratory change. The natural change is generally driven by the number of births and deaths. The migratory change is driven by economic and amenity factors that cause people to move into and out of an area. The economic factors include the presence or absence of well-paying employment, while the amenity factors are the "other" issues which make people want to live in an area or not. Long Beach's population is relatively stable and increasing, but not rapidly, rising from 1,283 in 2000 to an estimated 1,455 in 2006. This growth rate has been comparable to growth in Pacific County, though not as rapid as Washington State as a whole, as shown in Figure E-14.

Figure E-14: Population Growth, 2000 to 2006

CENSUS	2000	2001	2002	2003	2004	2005	2006
Pacific County	**20,984**	**21,000**	**21,000**	**20,900**	**21,000**	**21,300**	**21,500**
Unincorporated	13,969	13,885	13,940	13,880	13,955	14,200	14,255
Incorporated	7,015	7,115	7,060	7,020	7,045	7,100	7,245
Ilwaco	950	950	945	940	955	975	1,015
Long Beach	1,283	1,385	1,340	1,345	1,360	1,395	1,455
Raymond	2,975	2,975	2,985	2,960	2,970	2,975	3,005
South Bend	1,807	1,805	1,790	1,775	1,760	1,755	1,770
Washington State	5,894,143	5,974,910	6,041,710	6,098,300	6,167,800	6,256,400	6,375,600
Unincorporated	2,374,593	2,407,904	2,423,073	2,361,802	2,395,226	2,438,882	2,473,714
Incorporated	3,519,550	3,567,006	3,618,637	3,736,498	3,772,574	3,817,518	3,901,886

Source: State of Washington Office of Financial Management.

According to the Office of Financial Management estimates, 23.5 percent of Pacific County's residents are 65 or older, a greater proportion than any other county in the State of Washington. As a result, any population increase is necessarily caused by people moving into the area, as opposed to younger population that will experience a natural increase in population due to births to current residents.

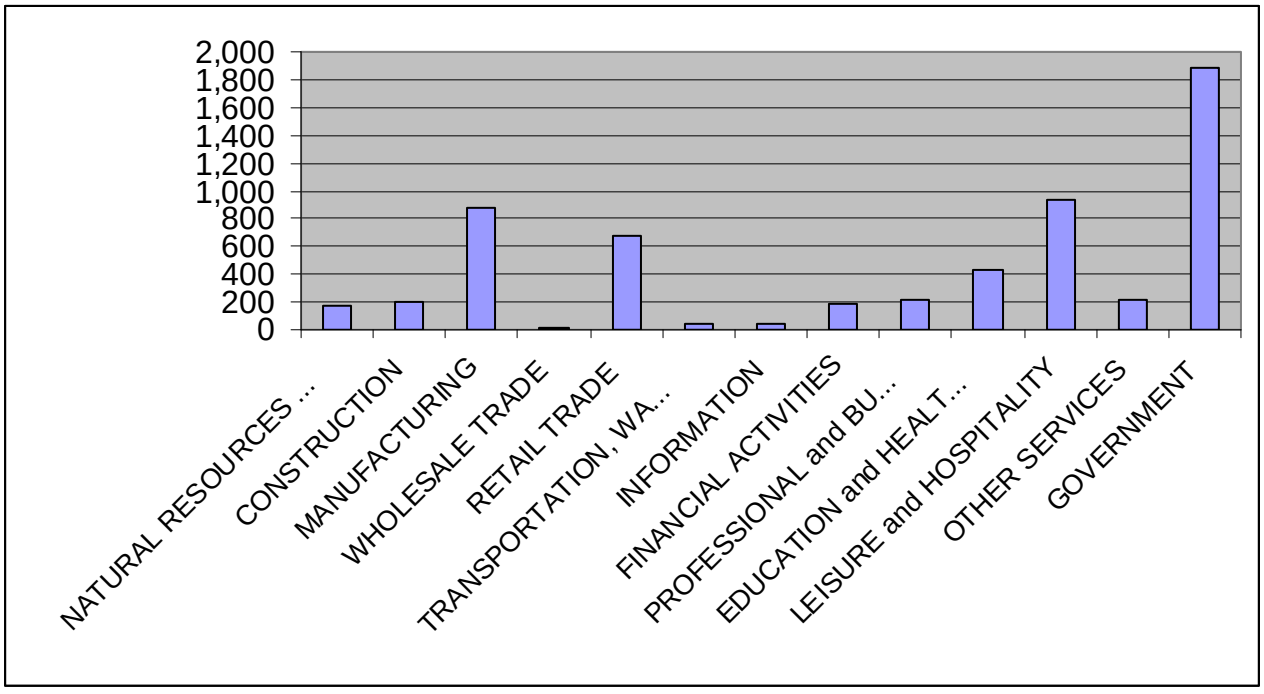
The population of Long Beach has been stable for the last 25 years. Population was reported in the 1980 census as 1,243; in the 1990 census as 1,236; in year 2000 as 1,283; and estimated in 2006 at 1,455, as shown above. While the population in Long Beach has been growing slowly, the rest of the Peninsula has been capturing a greater share of new residents. As a result, there has been some population increase on the peninsula. The population of the Peninsula Census County Division in Pacific County was 8,827 in year 2000, a 23-percent increase or 1,649 additional people over the 1990 population of 7,178.

6.2 Income

Income data show that the household incomes in the City of Long Beach are not as high as those in the county or the state as a whole.

The median household income in the City of Long Beach in 1999 (from the 2000 census) was $23,611, which would inflate to $27,678 in 2005 dollars. This compares to $31,209 from the census for Pacific County, which inflates to $36,585. Part of the explanation for this differential is a smaller proportion of typically higher paying jobs in the professional/technical and manufacturing sectors. The industry group responsible for the largest amount of employment in Pacific County is Government, as shown in Figure E-15 below.

Figure E-15: Employment by Industry, Pacific County, 2004



Source: State of Washington Employment Security Department.

6.3 Office Market

The market for professional office space is driven by employment requiring office space. Growth in employment leads to need for additional office space. According to employment forecasts developed by the Washington State Office of the Forecast Council and Forecasting Division of the Office of Financial Management, employment in Washington State is expected to grow about 1.9 percent annually between year 2004 and 2009, slowing slightly to 1.2 percent annually between years 2009 and 2014. Pacific County's employment is also expected to grow, albeit at a somewhat slower pace, an increase of 1.2 percent annually between 2004 and 2009 and an increase of approximately 1.0 percent annually from years 2009 and 2014, as shown in Figure E-16.

Figure E-16: Employment Projections, Pacific County, 2004-2014

INDUSTRY GROUP	EST. EMP. 2004	EST. EMP. 2009	EST. EMP. 2014	AVG. ANNUAL GROWTH RATE 2004-2009	AVG. ANNUAL GROWTH RATE 2009-2014
TOTAL NONFARM	**5,910**	**6,280**	**6,590**	**1.2%**	**1.0%**
NATURAL RESOURCES and MINING	170	150	140	-2.5%	-1.4%
CONSTRUCTION	200	230	240	2.8%	0.9%
MANUFACTURING	880	870	880	-0.2%	0.2%
WHOLESALE TRADE	20	30	30	8.4%	0.0%
RETAIL TRADE	670	710	730	1.2%	0.6%
TRANSPORTATION, WAREHOUSING AND UTILITIES	50	60	60	3.7%	0.0%
INFORMATION	50	50	50	0.0%	0.0%
FINANCIAL ACTIVITIES	190	200	210	1.0%	1.0%
PROFESSIONAL and BUSINESS SERVICES	210	220	260	0.9%	3.4%
EDUCATION and HEALTH SERVICES	430	480	510	2.2%	1.2%
LEISURE and HOSPITALITY	940	1,020	1,080	1.6%	1.1%
OTHER SERVICES	220	250	260	2.6%	0.8%
GOVERNMENT	1,880	2,010	2,140	1.3%	1.3%

Source: State of Washington Employment Security Department.

These increases would yield a total increase of approximately 11.5 percent by year 2014. These increases would vary over industry groups, with natural resources and mining actually expected to lose jobs over the forecast period, as shown in Table 2 above. To allocate these Pacific County jobs to the City of Long Beach, the Washington State Employment Security Department recommends applying the allocation of jobs from the 2000 census in which Long Beach represented 6.58

percent of all jobs in Pacific County. Applying this allocation yields the following employment forecast for Long Beach, as shown in Figure E-17.

Figure E-17: Long Beach Estimated Employment

USING THE CENSUS-SHARE ALLOCATION SUGGESTED BY THE WASHINGTON STATE ESD

	EST. EMP. 2004	EST. EMP. 2009	EST. EMP. 2014	AVG. ANNUAL GROWTH RATE 2004-2009	AVG. ANNUAL GROWTH RATE 2009-2014
TOTAL NONFARM	**389**	**413**	**434**	**1.2%**	**1.0%**
NATURAL RESOURCES and MINING	11	10	9	-1.9%	-2.1%
CONSTRUCTION	13	15	16	2.9%	1.3%
MANUFACTURING	58	57	58	-0.3%	0.3%
WHOLESALE TRADE	1	2	2	14.9%	0.0%
RETAIL TRADE	44	47	48	1.3%	0.4%
TRANSPORTATION, WAREHOUSING AND UTILITIES	3	4	4	5.9%	0.0%
INFORMATION	3	3	3	0.0%	0.0%
FINANCIAL ACTIVITIES	13	13	14	0.0%	1.5%
PROFESSIONAL and BUSINESS SERVICES	14	14	17	0.0%	4.0%
EDUCATION and HEALTH SERVICES	28	32	34	2.7%	1.2%
LEISURE and HOSPITALITY	62	67	71	1.6%	1.2%
OTHER SERVICES	14	16	17	2.7%	1.2%
GOVERNMENT	124	132	141	1.3%	1.3%

Source: State of Washington Employment Security Department.

From the City's land inventory, there is approximately 10 acres of land currently devoted to professional office space. Assuming an average floor-area coverage of 0.20 to 0.25, this translates to approximately 80,000 to 120,000 square feet of professional office space in the City. Applying the growth in employment projected to year 2014 and assuming the space per employee stays relatively constant, these projections translate to an increase in demand for office space in Long Beach of between 10,000 and 15,000 square feet of office space by year 2014, as shown in Figure E-18.

Figure E-18: Office Market Overview, City of Long Beach

Estimated acres of land dedicated to professional office	10.4
Average existing floor-area ratio	.2-.25
Estimated amount of existing professional office space	80,000-120,000
Square footage requirements per employee (suburban environments)	250-350
Estimated number of employees requiring professional office space	250-400
Forecast increase in professional services and real estate	11.5%
Additional square footage of office space required	10,000-15,000

6.4 Retail Market

The retail market in Long Beach requires a two-pronged approach to effectively capture the convenience market for residents while still appealing to the destination shoppers of the visitor market. While the City's retailers have managed to capture strong visitor spending of those who visit the area, a challenge for retailers in Long Beach is the propensity of shoppers to seek better prices and selection elsewhere. The trade areas for most convenience goods are defined by consumer distance and convenience factors. As households have been getting smaller and the age of householders older, consumers seek more convenient locations and utilize more services nearby. There is some potential for retailers who can take advantage of convenience-seeking shoppers and appeal to local loyalties in Long Beach. The kinds of markets that can be expected to capture market share in this way include convenience goods, personal services, household equipment and restaurant facilities.

As noted earlier, on average, households spend about one-third of their income on housing. Other categories of expenditures can be estimated using the Consumer Expenditure Survey. Other large categories of expenditures include transportation (about 13 to 16 percent of a household's income), food (11 to 12 percent), and insurance and pensions (9 to 10 percent). A summary of the average percent of a household's income spent on different categories is shown in Figure E-19.

Figure E-19: Average Household Expenditures, As a Percentage of Total Household Income

BASED ON THE WESTERN US AND PORTLAND, OR CONSUMER HOUSEHOLDS

Average annual expenditures	
Food	11-12%
Food at home	6-7%
Food away from home	5%
Alcoholic beverages	1%
Housing	28-29%
Utilities, fuels, and public services	5-17%
Household operations	2%
Housekeeping supplies	1%
Household furnishings and equipment	3-4%
Apparel and services	3-4%
Transportation	13-16%
Heath care	5%
Entertainment	5%
Personal care products and services	1%
Reading	<1%
Education	2%
Tobacco products	<1%
Misc	1%
Cash contributions	3%
Personal insurance and pensions	9-10%

Source: Consumer Expenditure Survey.

Based on these spending patterns, businesses in Long Beach may find the opportunity to meet some of the retail spending needs of local consumers. One challenge for a community like Long Beach is the cyclical nature of its residents. As noted earlier, 495 of the estimated 1,169 housing units in Long Beach are classified as vacant. With over one-third of the housing units only seasonally occupied, these households and their spending do not support the retail services in the area year-round. Though population has been relatively stable in Long Beach, the peninsula has been experiencing some growth. As the trade areas for most retail and services include most of the peninsula, this population growth coincides with additional market demand for those consumers.

The number of businesses located in Long Beach has been steadily rising, from 208 businesses licensed in 2002 to 296 businesses licensed in 2005. Through August of 2006, 220 businesses have applied for or renewed their licenses.

6.5 Resort Market

Overnight lodging facilities have also struggled with the seasonal nature of the population. While a strong visitor population would suggest a robust market for hotel/motels, it has been reported that some overnight lodging facilities have been converted to condominiums and timeshares, leading to a moratorium (2007) on this type of conversion activity. Nationwide, hotels/motels have enjoyed increases in revenues and profits, but have also experienced rising expenses. The largest marginal expense related to operating a hotel is labor, which is directly related to the prevailing wages for the area. Limited-service hotels have been faring better than full-service hotels, in part because some of the provided amenities and services may not be valued by the patrons.

6.6 Summary of Issues

Long Beach economy could be bolstered by limiting the amount of leakage that occurs to nearby destinations for consumable and household goods. However, its land use and zoning will need to support the current trend in this market that leans towards bigger box developments. Primarily a tourism based economy and interested in remaining so, Long Beach will need to work with local residents and businesses to not only develop family friendly and affordable stay options, but think creatively in terms of more bed and breakfasts, in-home stay options, youth hostels and so on. It is unlikely that Long Beach will play any major role in more light industrial development without negatively impacting its residential flavor. Rather the city might want to work with the County and Ilwaco to develop a Peninsula-wide strategy for industrial development.

7. TRANSPORTATION

This Section documents the analysis of existing conditions on the Long Beach transportation system. The Existing Conditions Analysis has six sections: (1) Street System, (2) Traffic Volumes, (3) Traffic Operations, (4) Public Transportation, (5) Non-Motorized Transportation, and (6) Aviation.

7.1 Street Network

7.1.a. STREET NETWORK DESCRIPTION

The Long Beach street network is primarily a grid of north-south and east-west streets; however, like the city's corporate limits, the city street grid is long and narrow on a north-south axis parallel to the shoreline. (The City of Long Beach and Long Beach Peninsula road networks are shown in Figure E-20:). The only through street that traverses the entire length of the city is State Route (SR) 103 (Pacific Avenue), which serves not only as the city street network's "spine," but also provides connections to the county and state highway systems via SR 101 south of town and to the north end of the Long Beach Peninsula. Continuous access between SR 101 and the north end of the Peninsula also is provided by Sandridge Road, which is located east of the city along the eastern shore of the Peninsula.

Other narrow, largely residential streets provide north-south connections through portions of the city. These include, in particular, Ocean Beach Boulevard one block west SR 103, and Washington Avenue one-to-two blocks east of SR 103.

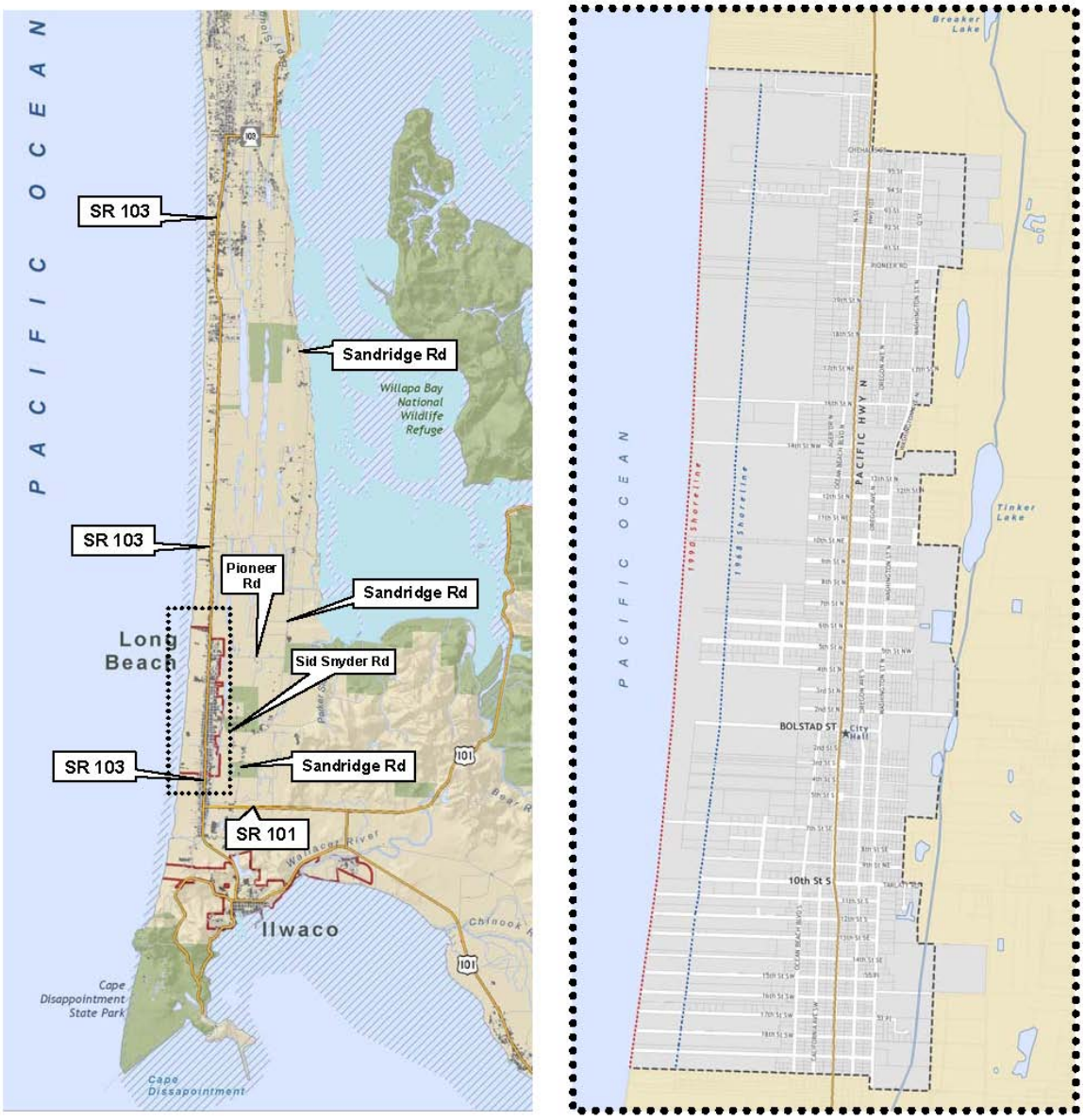
Most east-west streets in the city are short, extending two-three blocks east and west of SR 103. Access to the county road system outside the city is available in only three locations: Pioneer Road (21st Street N.) and Sid Snyder Road (10th Street S.) both link directly to Sandridge Road, and 2nd Street N. connects to Sid Snyder Road via V Street east of town.

7.1.b. STREET NETWORK EVALUATION

- Local street connectivity is inadequate, particularly on the west side of SR 103 north of downtown. In this area, Ocean Beach Boulevard, immediately west of SR 103, is the only through north-south street. For all existing and future development along the beach and inland, it is the only link between the various east-west residential streets and it is the only local street link west of SR 103 between these residential areas and downtown. North-south local street connections, like Shoreview Dr, are needed west of Ocean Beach Boulevard.

As part of the Comprehensive Plan update, provisions should be made for developing a complete local street network that has good connectivity and provides convenient vehicular access and circulation throughout the city.

Figure E-20:Long Beach Street Network



7.1.c. TRAFFIC CONTROL INVENTORY

Intersection traffic controls on the Long Beach street system are shown in Figure E-21. As shown in the Figure, there are two traffic signals on SR 103 (at Bolstad and at Sid Snyder Road–Sid Snyder Road), and

there are a handful of intersections with all-way stop control (AWSC): Ocean Beach Boulevard at14th N., 9th N., 5th N., 17th S, and 20th S; Washington Avenue at 9th N., 2nd N., 5th S, and 20th S; and 5th Street S. at Oregon. All other intersections have two-way stop control (TWSC – one street is controlled by a stop sign and the other is not).

The pattern of stop sign control on Long Beach streets gives priority to through north-south movement on virtually every north-south street, including SR 103, Ocean Beach Boulevard, Washington Avenue, Oregon Avenue (south of Bolstad only), and south of Sid Snyder Road, California Avenue and Idaho Avenue. Only on Oregon Avenue north of Bolstad are stops signs arranged to discourage north-south through movement. The city's system of stop sign controls give east-west traffic on Pioneer Road and on Sid Snyder Road priority over north-south city street traffic; east-west traffic is given equal priority on 9th N., 2nd N., 5th S, and 20th S.

7.1.d. FUNCTIONAL CLASSIFICATIONS

The current Comprehensive Plan Transportation Element (adopted in 1998) defines three functional classes for the various streets in the city network: Arterials, Collectors, and Local Roads. The classes are defined as follows:

Arterials are streets that are relatively continuous, have relatively high traffic volumes, carry longer trips, and have higher operating speeds.

Collectors are streets that collect and distribute traffic between local roads and arterials.

Local Roads provide access to adjacent properties.

The city functional classifications are shown in Figure E-23. The Comprehensive Plan Transportation Element designates SR 103, Washington Avenue, Sid Snyder Road, Ocean Beach Boulevard (2nd Street N. to Sid Snyder Road), Bolstad Street, and 2nd Street N. as Arterials. Ocean Beach Boulevard north of 2nd Street N. and south of Sid Snyder Road, Pioneer Road, Idaho Avenue, Oregon Avenue, and California Avenue are designated as Collectors. All other streets are Local Roads.

As part of the Comprehensive Plan update, the city's entire functional classification system – the set of classification types, the definitions of the classification types, and the classification assigned to each city street – will be revised and refined as necessary.

Figure E-21: Intersection Traffic Control (North Long Beach)

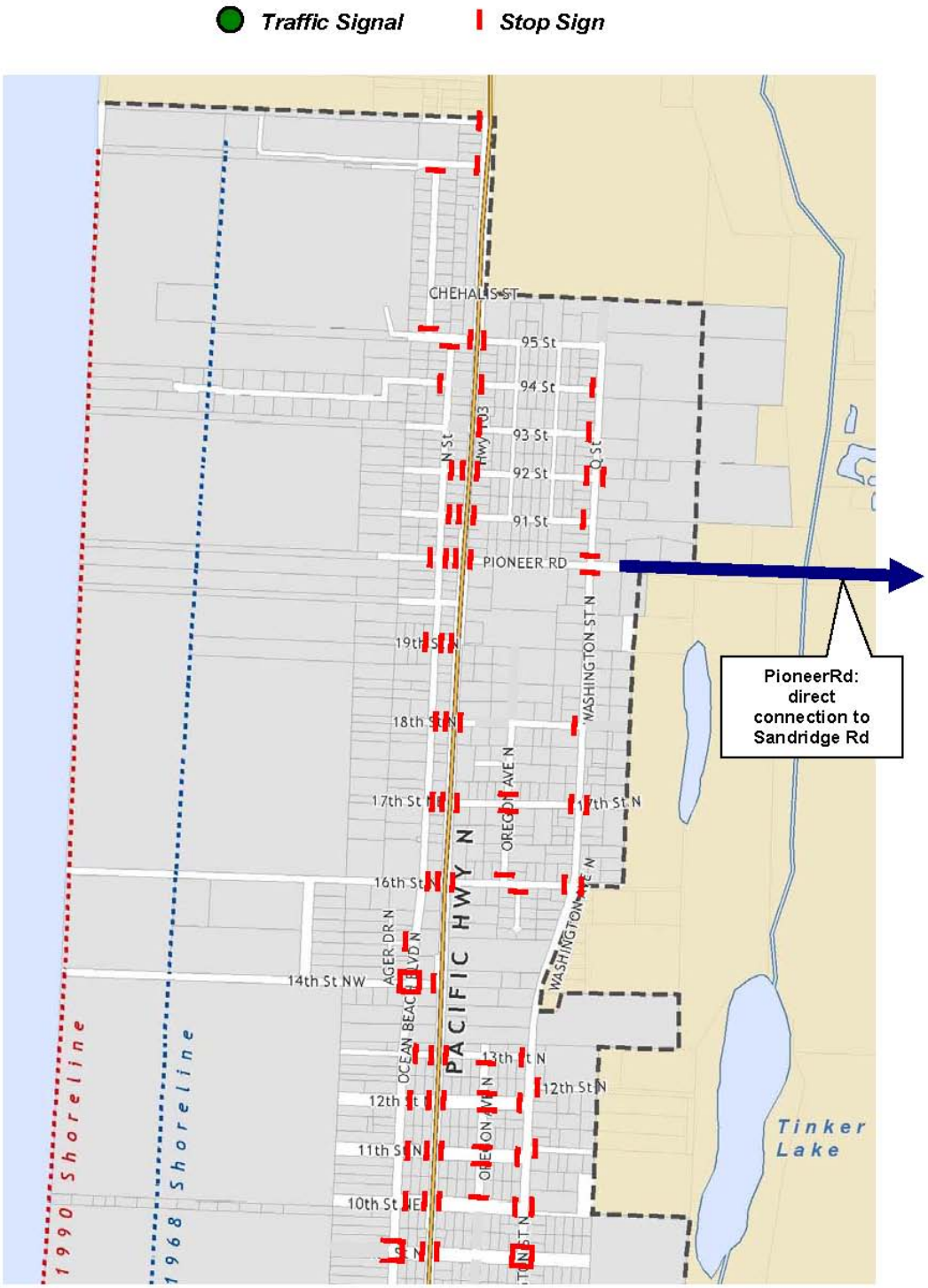


Figure E-22: Intersection Traffic Control (South Long Beach)

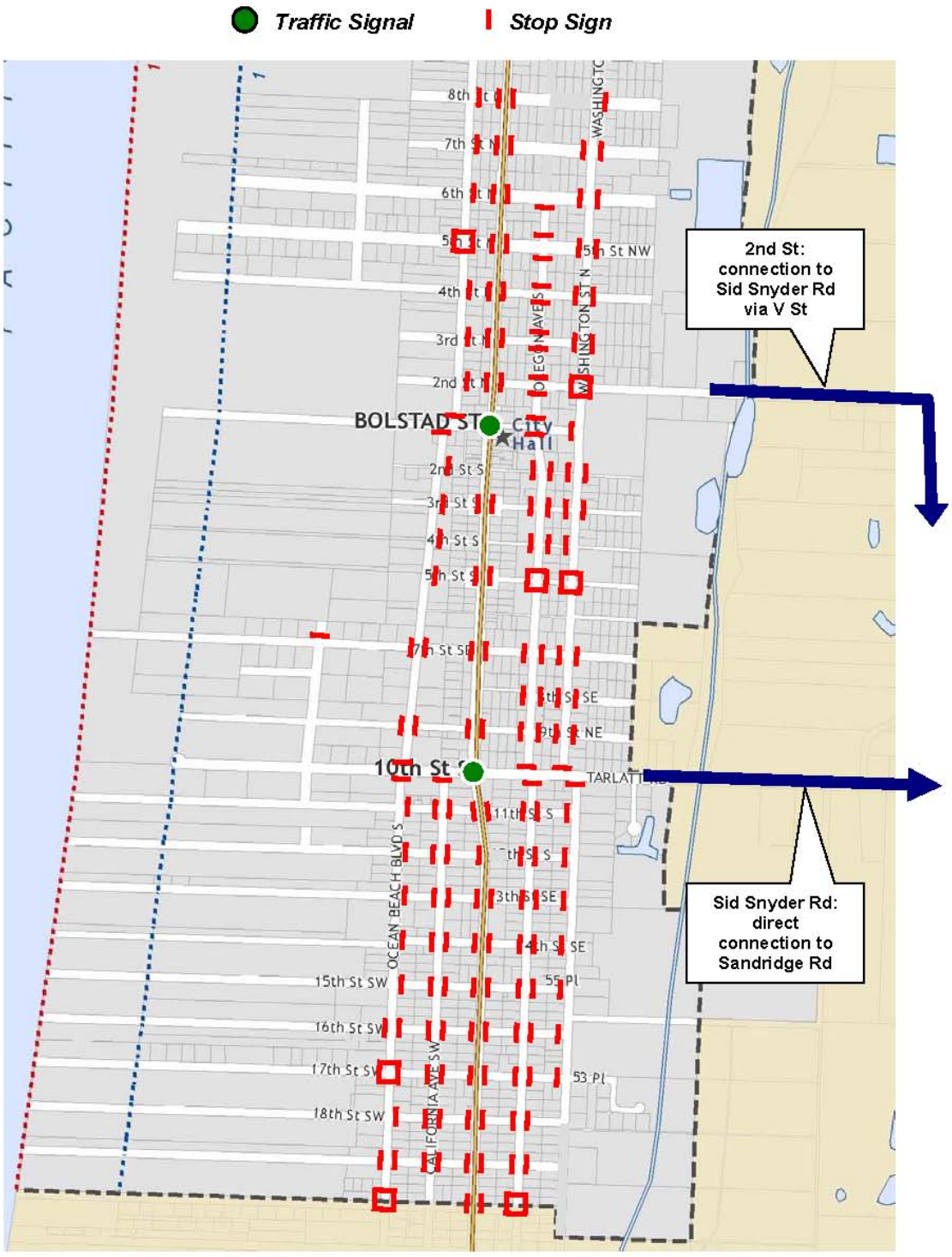
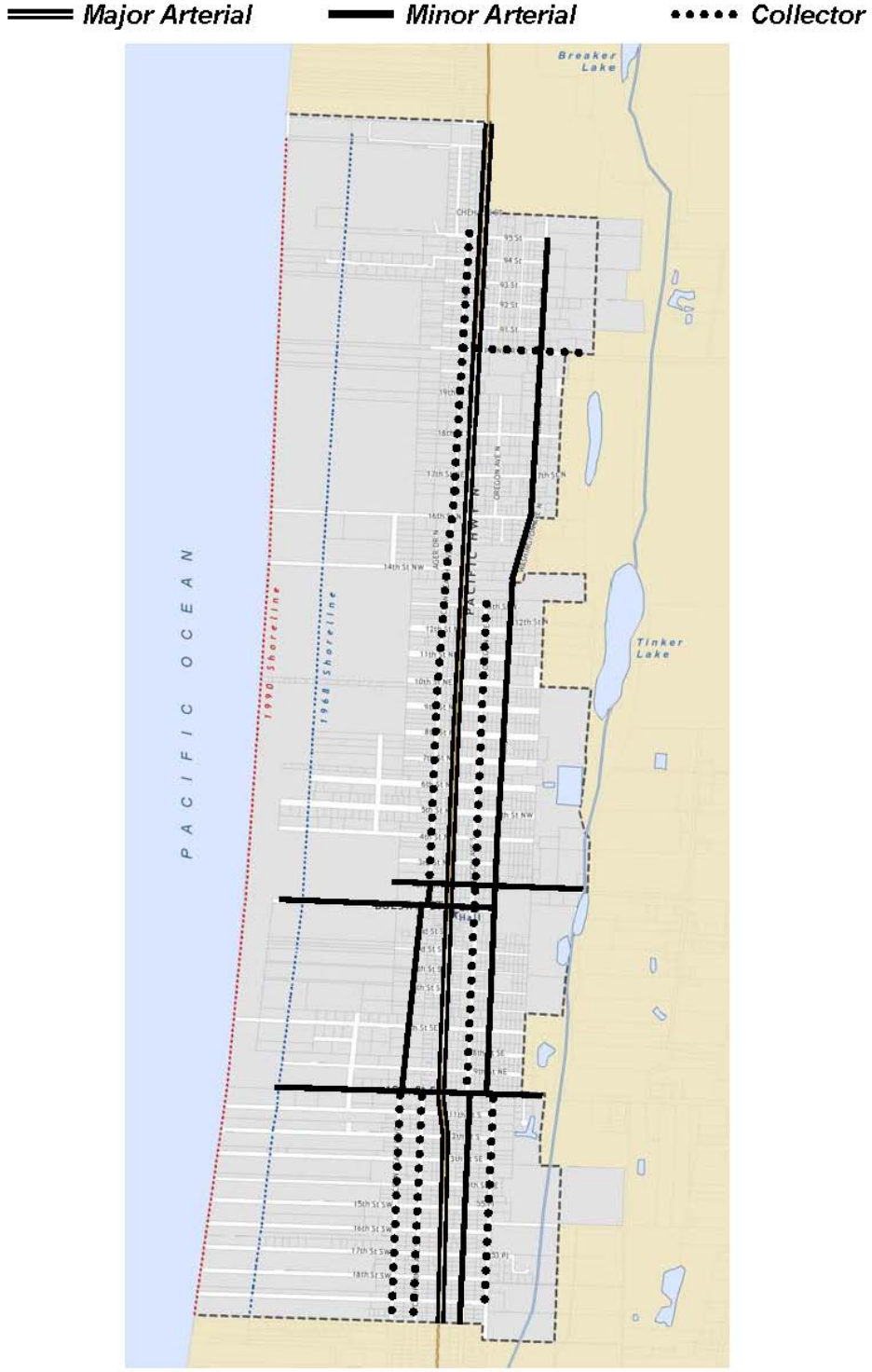


Figure E-23: City of Long Beach Functional Classifications



Source: City of Long Beach Comprehensive Plan Transportation Element, 1998

7.2 Traffic Volumes

The 1999 Pacific County Long Beach Peninsula Transportation Study (LBPTS) included a thorough technical analysis of the Long Beach street system. That analysis contained a complete set of intersection traffic counts, operational analyses, and 2020 traffic forecasts and analyses for "typical" conditions and for peak (summer weekend) conditions. The 1998 and 2020 peak traffic volumes on the city arterial system are compiled in Figure E-24. As shown in the Figure, summer peak traffic volumes are expected to increase by as much as 40%-45%; this translates to a modest average growth rate of approximately 2% per year.

7.3 Traffic Operations

The LBPTS contained a complete set of intersection operational analyses for 1998 traffic counts and for 2020 traffic forecasts. The analyses were prepared for "typical" conditions and for peak (summer weekend) conditions. The results of the peak operational analyses are reported in this section.

7.3.a. TRAFFIC OPERATIONS ANALYSIS METHODOLOGY

Traffic operations analyses were based on the "Level of Service" (LOS) determined for each study intersection. The Highway Capacity Manual[7], published by the Transportation Research Board and used nationwide, defines LOS as follows:

"Level of Service" (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with A representing the best operating conditions and F the worst. Each level of service represents a range of operating conditions and the driver's perception of those conditions. Safety is not included in the measures that establish LOS."[8]

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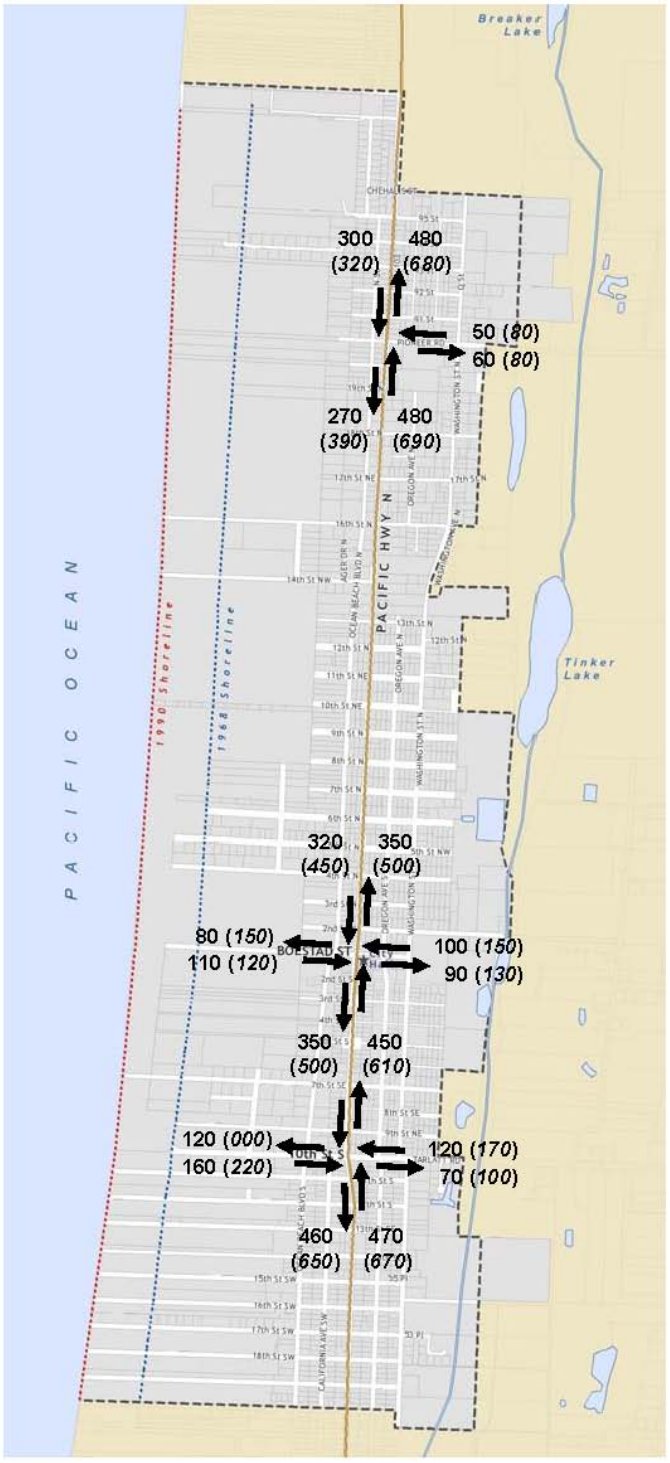
[7] *Highway Capacity Manual* (HCM2000), Transportation Research Board, National Research Council, 2000

[8] *Highway Capacity Manual* (HCM2000), p. 2-2

Figure E-24: Summer P.M. Peak Hour Traffic Volume



Source: *Long Beach Peninsula Transportation Study*, Pacific County, December, 1999

LOS is used by planners, engineers, and the lay public alike to assess traffic conditions, to identify problems, and to develop improvements and "solutions." In addition, local governments and other public agencies responsible for transportation use LOS to set standards for traffic conditions. LOS is determined for the peak 15 minutes of a 1-hour period. The traffic volumes on which LOS analyses are based can be traffic forecasts or actual traffic counts. In addition to traffic volumes, LOS is based on roadway characteristics (numbers and configuration of lanes, lane width, roadway grade, etc.) and the types of traffic controls.

As implied in the definition above and outlined below, LOS is determined differently for different types of intersections (see Figure E-25).

Signalized intersections: LOS is determined for the intersection as a whole, and is based on average control delay – i.e., delay attributable to the traffic signal – for vehicles entering the intersection.

All-Way Stop Control (AWSC) intersections: LOS is determined for the intersection as a whole, and is based on average delay for vehicles entering the intersection.

Two-Way Stop Control (TWSC) intersections: LOS is determined for the individual "minor" movements (i.e., those movements that must stop or yield), and is based on average delay for vehicles entering the intersection.

Figure E-25: Intersection Level of Service

LOS	AVERAGE DELAY		
	SIGNALIZED INTERSECTIONS	AWSC INTERSECTIONS	TWSC INTERSECTIONS
A	≤ 10 SEC/VEH	≤ 10 SEC/VEH	≤ 10 SEC/VEH
B	10-20 SEC/VEH	10-15 SEC/VEH	10-15 SEC/VEH
C	20-35 SEC/VEH	15-25 SEC/VEH	15-25 SEC/VEH
D	35-55 SEC/VEH	25-35 SEC/VEH	25-35 SEC/VEH
E	55-80 SEC/VEH	35-50 SEC/VEH	35-50 SEC/VEH
F	> 80 SEC/VEH	> 50 SEC/VEH	> 50 SEC/VEH
Source	*HCM2000, Exh 16-2*	*HCM2000, Exh 17-22*	*HCM2000, Exh 17-2*

7.3.b. TRAFFIC ANALYSIS RESULTS

Results of the 1998 and 2020 peak period intersection traffic operations analyses are compiled in Figure E-26.

As shown in the table, the SR 103/Pioneer and SR 103/Sid Snyder Road (10th Street S.) intersections both operate at adequate LOS C conditions in 2020. The SR 103/Bolstad intersection already operates at an unacceptable LOS F, but the planned improvements – as specified in the LBPTS – will permit the intersection to operate at LOS C in 2020.

Figure E-26: Peak Hour Intersection Level of Service (LOS)

INTERSECTION	CONTROL TYPE	1998		2020	
		LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)
SR 103 / Pioneer	TWSC	B	8	C	15
SR 103 / Bolstad with planned improvements	SIGNAL	F	75	F C	113 23
SR 103 / 10th St S	SIGNAL	B	7	C	15

Source: Long Beach Peninsula Transportation Study, Pacific County, 1999

7.3.c. EVALUATION OF TRAFFIC CONDITIONS

- Although the 1999 LBPTS is seven years old, its findings and recommendations are not out-of-date, and an update of the LBPTS technical analyses is not recommended at this time, because the LBPTS conclusions and recommendations are still applicable.

Updating the 1999 counts and existing conditions analyses to 2006 and updating the forecasts and future analyses to 2025 or 2030 would likely lead to the same basic conclusions as the 1999 LBPTS: i.e., that the SR 103/Bolstad intersection is congested and should be improved (the improvement project is programmed); that all other intersections have adequate capacity "on paper" to accommodate existing and future traffic volumes; and that various street, traffic control, and parking improvements can be considered for urban design and/or access/circulation improvement purposes.

- Although the technical analyses find that most Long Beach intersections have adequate capacity for even the highest peak season traffic volumes, the fact remains that SR 103 experiences serious congestion, particularly between Sid Snyder Road and 5th Street N.

The explanation for the seeming contradiction between the analytical results and real world observations is that the very real congestion is not caused by excessive volumes of traffic that the street system cannot handle; rather, the congestion is caused by general downtown

Long Beach activity, including pedestrian movement, parking maneuvers, high proportions of turns, and the slow way-finding of the many out-of-towners unfamiliar with the street system.

The conclusion is that much of the traffic in downtown Long Beach is local traffic, and that diversion of through traffic enroute to/from the north end of the peninsula would not eliminate the downtown congestion.

- A Long Beach by-pass to the north end of the peninsula exists via Sandridge Road. Traffic wanting to avoid downtown Long Beach congestion on SR 103 can and do use Sandridge Road. If desired, development of roadway and signage improvements that may increase use of Sandridge Road and help relieve SR 103 can be investigated.

7.4 4. Public Transportation

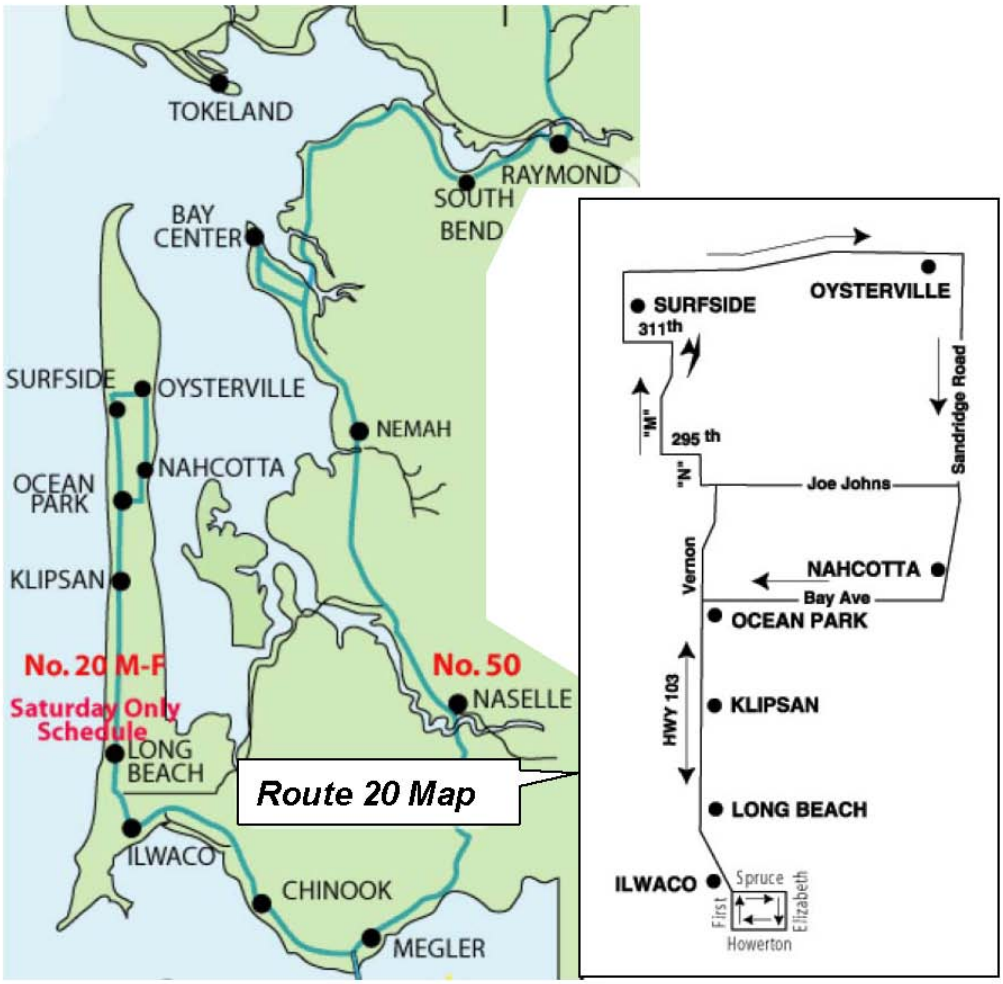
7.4.a. LOCAL/REGIONAL TRANSIT

Public transportation service in Long Beach is provided by the Pacific Transit System, which operates both fixed-route and "demand-responsive" ("dial-a-ride") services in Pacific County and the city of Long Beach (see Figure E-23). Pacific Transit's Route 20 operates on SR 103 through Long Beach, making 14 runs (each direction) between 5:30 a.m. and 6:30 p.m. on weekdays, and five runs between 10:00 a.m. and 5:30 p.m. on Saturdays.

7.4.b. INTERCITY TRANSPORTATION

Pacific Transit System bus routes link Long Beach to Astoria, Oregon, to the south, to the cities of South Bend and Raymond in northern Pacific County, and to Aberdeen in Grays Harbor County to the north. No passenger rail or other intercity bus service is provided directly to Long Beach. Amtrak passenger rail service can be accessed in Vancouver, Longview, and Centralia, and Greyhound bus service can be accessed in Vancouver, Kelso, and Centralia.

Figure E-27: Long Beach Transit Service



Source: Pacific Transit website, September, 2006

7.5 Non-Motorized Transportation

7.5.a. EXISTING PEDESTRIAN AND BICYCLE FACILITIES

The current Comprehensive Plan Transportation Element identifies several "Pedestrian and Bicycle Boulevards" that are intended to "provide alternate modes of travel within the city and the city service area." The designated Pedestrian and Bicycle Boulevards are:

State Route 103 Human-Powered Vehicle (HPV) Lane. The SR 103 HPV Lane is a striped bicycle lane on the west (southbound) side of SR 103 north of 4th Street N. and south of Sid Snyder Road. Between 4th Street N. and Sid Snyder Road the HPV shifts a block west to Ocean Beach Boulevard, where it is co-located with a sidewalk along the west (southbound) side of the street.

Discovery Trail. The Discovery Trail began as the Dune Trail, a paved boulevard between 14th Street N. and 17th Street S. located on the east (inland) side of the oceanfront dune area. The Discovery Trail now stretches 8.2 miles from 26th Street N. through Seaview to Beard's hollow on the south end of the beach, and inland to Main Street in Ilwaco. Two segments through the dunes and across the headlands to Ilwaco, totaling about 2.75 miles, are not paved; the remainder of the Discovery Trail is paved.

Boardwalk. The Boardwalk is a raised wood-plank walkway between Bolstad Street and Sid Snyder Road located on the east (inland) side of the oceanfront dune area.

In addition to the Pedestrian and Bicycle Boulevards, there are paved sidewalks on both sides of SR 103 through the central "downtown" area.

It also should be noted that the city's fairly small block sizes create shorter street-to-street distances and make for a more "walkable" city by providing better pedestrian connectivity and accessibility.

7.5.b. Existing Pedestrian and Bicycle Activity and Needs

Heavy traffic makes SR 103 an unfriendly place for pedestrians and bicyclists, more and more of whom are avoiding SR 103 by using the parallel streets, Washington Avenue and to a much greater extent, Ocean Beach Boulevard. Unfortunately these streets are narrow with no shoulder or sidewalk, and increasing local traffic volumes creates increasing conflict with pedestrians and bicycles in the street.

With its fairly level terrain and leisurely pace, Long Beach is ideally suited for high levels of walking and bike travel. Facilitation of convenient pedestrian and bicycle circulation can help reduce automobile use in a meaningful way.

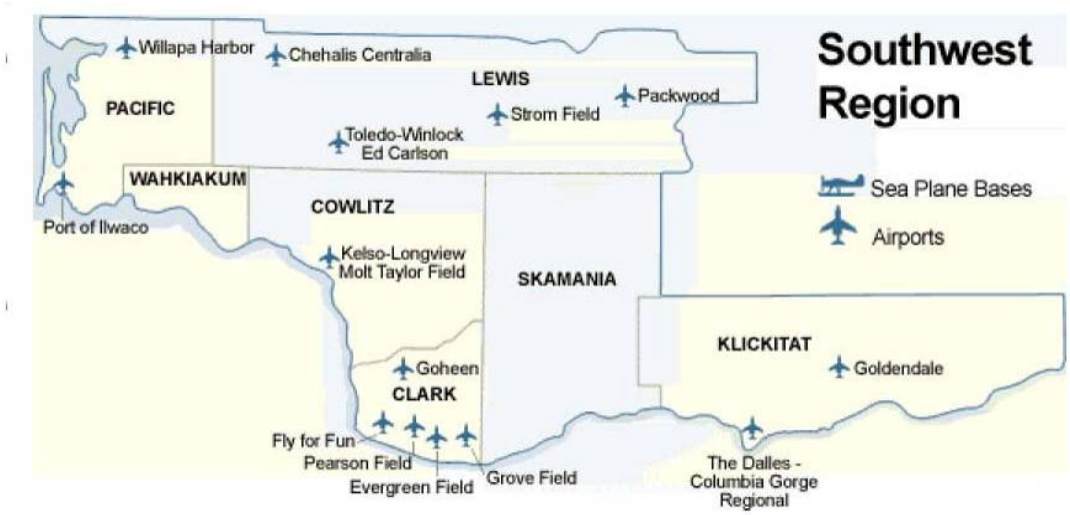
As part of the Comprehensive Plan update, a comprehensive "non-motorized" transportation (pedestrian and bicycle) plan should be developed. The Non-Motorized Transportation Plan should identify a complete network of pedestrian and bicycle routes and connections, as well as the physical and traffic control improvements needed to make pedestrian and bicycle travel "attractively convenient" throughout the City, and to connect to other bike routes and trails on the Peninsula.

7.5.c. Aviation

There are no airports in the City of Long Beach or on the Long Beach Peninsula north of the city; however, the Port of Ilwaco general aviation airport is easily accessible only a short distance to the south. Other general aviation airports fairly close to Long Beach include the

Willapa Bay Airport in Raymond and the Astoria, Oregon, Airport (see Figure E-28). The closest commercial airports are Portland International and Seattle-Tacoma International.

Figure E-28: Southwest Washington General Aviation Airports



Source: Washington State Department of Transportation Aviation Division website, September, 2006

7.6 Summary of Issues

Long Beach has the opportunity to improve mobility through its city by developing an infrastructure that supports walking and biking, as well as some sort of convenient transit. This may be more prudent than focusing only on a city form based on vehicles and parking. With large surges of tourists and cars during festival season, Long Beach will need to develop a series of wayfinding and parking management series that will lessen the impact of these events on the residential population. An important regional access (Route 101) to Long Beach lies only several feel above sea-level along Willapa Bay. Long Beach may need to work with the County and the State to plan for possible impacts of global warming and rising sea levels on this access road.

8. CAPITAL FACILITIES

8.1 Fire

The Long Beach Volunteer Fire Department provides fire protection to the entire city population of about 1,455. The City has an interlocal agreement with the City of Ilwaco with an automatic response to Ilwaco for any confirmed structure fire. Ilwaco has the same response agreement.

The City is currently in the process of adding 4 bays in a building adjacent to the existing fire station. In spring 2007, the City placed into service a 95-foot ladder truck. There are no further plans on adding or replacing old fire engines.

The following is the inventory of facilities, equipment and staff:

- Facility - 1 Fire Station
- Equipment - 4 engines,
- 1 aerial truck (75 feet),
- 1 ladder truck (95 feet),
- 2 wildland trucks (6x6),
- 1 "Gator" wildland vehicle (1600 gallons),
- 1 beach rescue vehicle (4WD 1/2-ton pickup),
- 1 basic life support ambulance
- Staff - Up to 40 volunteer firefighters,
- Including 1 part-time fire chief

8.2 Law Enforcement

There are several accredited law enforcement agencies that serve the City of Long Beach and its surrounding areas. All these bodies work closely together to serve the community of Long Beach.

8.2.a. POLICE

The City provides police protection to the entire city population, as well as the City of Ilwaco. Following is the inventory of facilities, equipment and staff: Facility - 1 Police Station

- Equipment - 8 police cars,
- 1 4WD
- Staff - 6 full-time police officers (including a police chief),
- 1 administrative assistant,
- 2 additional part-time foot patrol officers in the summer.

8.2.b. WASHINGTON STATE PATROL

Their duties are primarilly concerned with the safety of state highways and beaches.

8.2.c. COUNTY SHERIFF

The County Sheriff provides police protection to all unincorporated areas.

8.2.d. STATE PARK RANGERS

Their responsibilities lie to protect State Parks as well as collaboration with the State Patrol to provide surveliance to beaches.

8.2.e. FISH AND WILDLIFE PROTECTION

The fish and wildlife protection body has their responsibility towards fishing and hunting violations.

8.2.f. U.S. COAST GUARD

District 13 of the U.S. Coast Guard has the jurisdiction to provide protection in all water bodies in the State of Washington. Being Long Beach a coastal location, the Coast Guard has direct relation with units in Ilwaco and Astoria, OR.

8.3 Education

The City has an elementary school (grades 1-6). The school is located at 400 Washington Avenue S. Currently (January, 2007) there are 245 students and 45 employees. The building has recently been remodeled and there are no expansion plans. The building has a Gymnasium that is used for assemblies, a cafeteria and kitchen, library and handicapped facilities. The City is served by a transportation system (bus) operated by School District 101.

The middle and high schools that serve the city are in District 101, and are located in the City of Ilwaco. The school capacity is 1,007 Head Count and 966 FTE. Currently (January, 2007) a new second building to reassign students from over-saturated classrooms is under construction. There are no further expansion plans.

8.4 Medical and Emergency Facilities

The City is served by the Ocean Beach Hospital located in the City of Ilwaco. This is a Level IV Trauma Center, providing Emergency and Diagnostic Services. Over 7,000 patients are treated every year. There are no medical clinics in Long Beach; clinics are located in Ilwaco and Klipsan Beach.

Medix, a private for-profit ambulance service, began serving Long Beach, Chinook and Ilwaco in 2007. Pacific County Fire District 1, with stations in Ocean Park and Seaview, provides ambulance service to the rest of the Peninsula. Long Beach, Ilwaco and Chinook have entered into an agreement with Fire District 1 for the provision of ambulance service should Medix not be available. Currently, Long Beach Fire Department can provide basic life support and has one ambulance.

Dental services are provided by 2 established dentists in Long Beach.

8.5 Library

The City is served by the Timberland Regional Libraries located in the City of Ilwaco and Ocean Park. In April 2007, the Washington Legislature voted to allot the city of Ilwaco with $2.7 million to renovate the building that currently houses the Ilwaco Timberland Regional Library and PACE[9]. Renovation plans include a variety of changes, including increasing space to more than twice the current size, moving the PACE dining center to the top floor and adding a meeting room.

8.6 City Hall and Community Meeting Space

The city currently lacks a significant public gathering space, beyond the elementary school gymnasium. The renovated Depot building offers meeting space for small 15-20 person gatherings. When not in session, the City Council Chambers are often used to host meetings.

8.7 Public Restrooms

There are 4 public restrooms in the city, 2 of which were constructed by State Parks but are maintained by the city. There are no plans for new public restroom services. Restrooms are located at 5th Street S. west of Pacific Avenue; at the Police Station at 3rd Street S and Pacific Avenue; west of 3rd Street S and south of the Bolstad Approach; and at the west end of the Sid Snyder Drive Approach.

8.8 Public Parks

See Parks, Open Space and Recreation Element

8.9 Sewer System10

Currently the majority of residences and commercial developments in Long Beach are connected to the City's sewer system. Unincorporated areas of the peninsula are on septic systems.

The collection system has six outlying pump stations. They pump to a main pump station and then into the treatment plant.

8.9.a. PUMP STATIONS

No 1 – South 15th Street and Oregon Avenue

No 2 – South 4th Street and Oregon Avenue

No 3 – North 12th Street and Oregon Avenue

No 4 – North 17th Street and Oregon Avenue

No 5 – North 26th Street and Ocean Beach Boulevard

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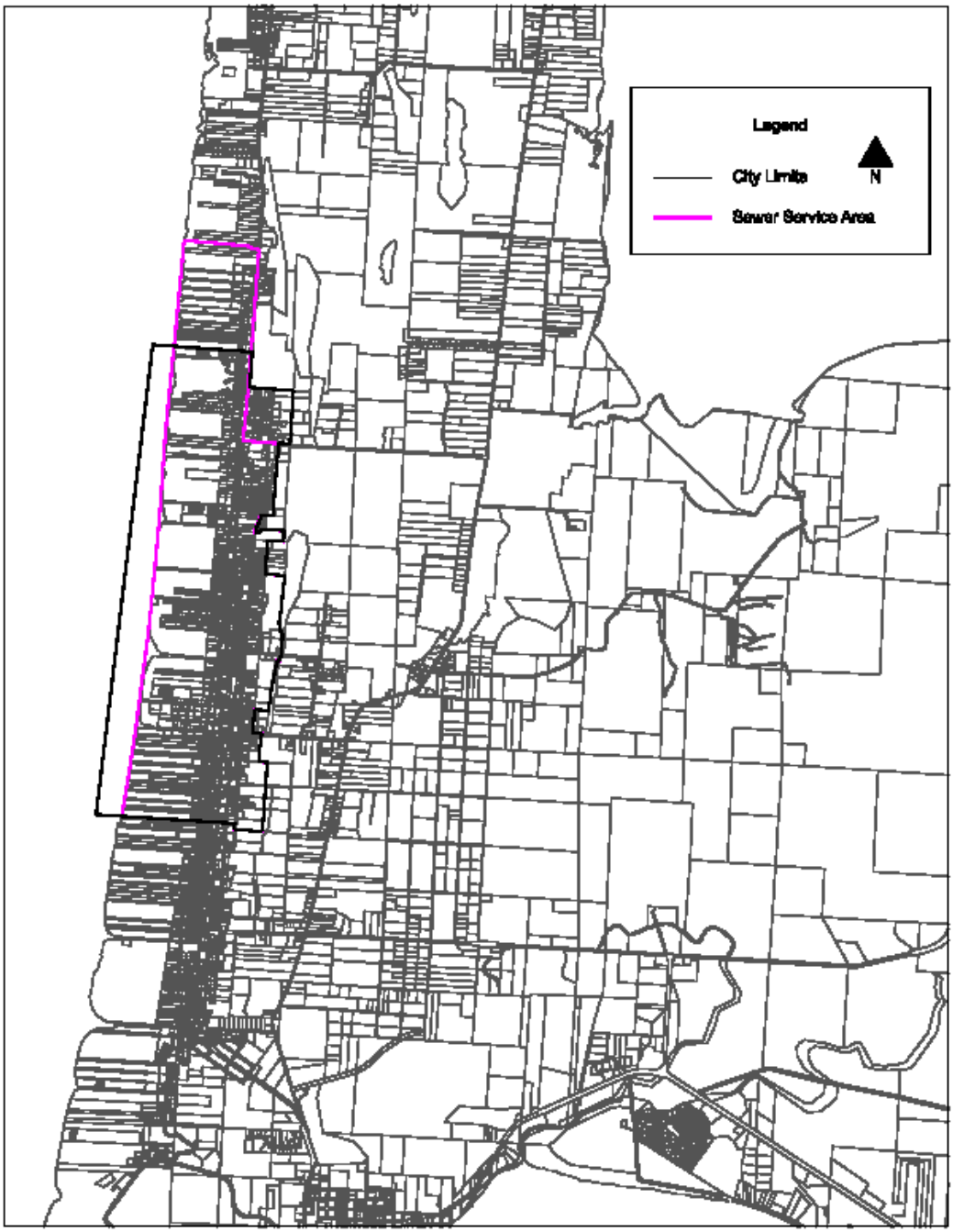
[9] The Observer, *Library-PACE facility getting $2.7 mil rebuild.* By Amanda Frink.

[10] This summary is based on the Sewer System Comprehensive Plan, prepared by Gray & Osborne, Inc. Consulting Engineers in May 1999. Updates were provided through interviews with city staff thanks to the aid of David Glasson.

Breakers Pump Station – North 26th Street West of Pacific Avenue

Main Pump Station – North 6th Street and Oregon Avenue

Figure E-29: Long Beach Sewer Service Area



8.9.b. SEWAGE OVERFLOWS

There are currently no overflow connections between the storm and sanitary sewers. There was one occasion during which excessive rainfall and flooding led to an overflow at the headworks of the treatment plant. During the period from December 27 through 28, 1994, flows reached 2.6 MGD, well in excess of the plant's 1.2 MGD peak capacity. With plant expansion in 2003-04, the overflow connection was cut and capped, eliminating any potential for future storm-related excess flows.

8.9.c. WASTEWATER TREATMENT PLANT

Located off Washington Avenue between Sixth and Seventh Streets North; entered from 6th Street N. The design criteria for the existing wastewater treatment plant are presented in Figure E-30.

Figure E-30: City of Long Beach Wastewater Treatment Plant Design Criteria[11]

PARAMETER	CRITERIA
Average Daily Flow Rate at Design	0.400 MGD
Peak Hourly Flow Rate	1.200 MGD
Influent Biological Oxygen Demand	800 lbs/day
Influent Total Suspended Soils	834 lbs/day
Design Population Equivalent	4,000 people

Source:

8.9.d. BIO-SOLIDS DISPOSAL

The forest application site is located about 2.5 miles from the treatment plant site. The land is owned by the City of Long Beach for use as a forest application site for sludge and uses 81 acres of the site for sludge application. The size of the site was recently increased from 75 acres, of which 30 acres were utilized for application. There are no known residences, developments, or wells within one-half mile of the site.

The City continues with the forest land application system. However, the 1999 Sewer System Comprehensive Plan proposes an additional alternative that involves combined City and contracted land application. This alternative would allow the city to send biosolids to the contractor during periods of precipitation or frozen ground. With two disposal options, the City can more readily adjust to changes.

[11] Source: City of Long Beach Sewer System Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 5. *Existing Conditions.*

8.9.e. EXPECTED GROWTH

Most residential and commercial development is assumed to occur in the Netarts soils which run along the spine of the peninsula, parallel to SR 103. Presently the city is approximately 70% developed. The area served by the Long Beach Wastewater Treatment Plant includes all areas within the municipal boundaries. The most recent addition to the service area is from Pioneer Road north to the Breakers.

In the 1997 Comprehensive Plan, the UGA was proposed to be expanded 350 feet northward (to 101st Lane) west of SR 103 by 2006, and a total of 2,150 feet northward (to approximately 110th Street) by 2016.

According to the 1997 Comprehensive Plan, future land use regulations should be designed to encourage more multi-family housing and keep resorts, hotels and other tourist amenities close to the historic old town center. The majority of the growth within the City of Long Beach is expected to occur in the dune area to the west of Ocean Beach Boulevard and to the north of Pioneer Road. Although sanitary sewer service is available, it requires the use of small pressure lines and a regional lift station; a few properties still have septic systems.

8.9.f. POPULATION PROJECTIONS

Due to the difficulty in defining an accurate transient population in Long Beach, the wastewater flows and loadings are based on resident population with the assumption that transient population will grow at approximately the same rate as resident population.

The City exhibits a development pattern typical of resort communities, with seasonal populations often doubling the year-round population. The City and surrounding unincorporated area are popular sites for vacation and retirement homes, and this is expected to continue or increase as the baby boomers approach retirement age. No information is available on the population of transient visitors. Projected resident populations used in the Sewer System Comprehensive Plan are summarized Figure 31.

Figure E-31: Projected Resident Populations12

YEAR	POPULATION*
2003	1,578
2008	1,775
2013	1,972
2018	2,191

**From Sewer System Comprehensive Plan May 1999; may differ from actual population projections for planning period.*

8.9.g. CONNECTION CHARGE13

As of 2007, and per Ordinance No. 779 (December 1, 2003), sewer connection capital charges are $2500.00, with an additional hookup fee charge of $2,500.00 per unit for multi-unit residential developments. The unit or units chargeable in addition to the basic charge are as set out below. The unit fee consists of $1,250.00 for sewer hookup. The unit fee for sewer for hotel/motels is $875 for each additional rentable unit. The installation fees are presented in Figure E-32.

[12] Source: City of Long Beach Sewer System Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 3. *Land Use, Population and Planning.*
[13] City of Long Beach, Ordinance No. 779. Long Beach Washington.

Figure E-32: Sewer Connection Fees14

Single Family Dwelling	1 Unit
Multiple Family Dwellings	1 Unit per living unit
Schools	1 Unit per 20 students
Motels and Hotels	1 Unit per rentable unit
Motel and Hotel Laundry Rooms	1 Unit per 2 washers
Mobile Home/RV Parks	1 Unit per 2 trailer spaces
Laundry/recreational-Mobile/RV Parks	1 Unit per 2 washers
Restaurant	1 Unit per 10 seat capacity
Hospital and other institutions	1 Unit per 3 beds
Commercial and Industrial	1 Unit per 9 Employees or fraction thereof.
Launderette	1 Unit per 2 washers
Auto Service Station	2 Units
Car Wash	4 Units for each 3 stalls or fraction thereof.
Public Meeting Places (includes theaters and churches)	1 Unit per 200 seat capacity

Any users not defined above: To be set by Director of Public Works subject to approval of the Council.

8.9.h. RATES

Sewer user rates are described in Ordinance 778 and they are increased each year according to the cost of living index15. Currently there is no linkage between sewer rates and water use. Such a linkage encourages water conservation and creates more equitable sewer rates by linking rates to the approximate quantity of wastewater flow. Further study of the City's sewer rate structure options is recommended. [16]

[14] City of Long Beach, Ordinance No. 779. Long Beach Washington.
[15] City of Long Beach, Sewer Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 11. *Financing Program*
[16] Ibid

Figure E-33: Sewer Rates in the City[17]

SEWER TYPE	2003	2004	2005	2006
Single Family Residence	$24.71	$25.45	$26.21	$35.91
Apartments, Per Unit	$24.71	$25.45	$26.21	$35.91
Motels, Base Charge	$32.95	$33.94	$34.96	$47.89
Motels, each additional rental	$5.59	$5.76	$5.93	$8.12
Condominiums, each rental	$24.71	$25.45	$26.21	$35.91
Mobile Home Parks, each rental space	$24.71	$25.45	$26.21	$35.91
Trailer Parks, Base Charge	$32.95	$33.94	$34.96	$47.89
Trailer Parks, each hookup	$4.12	$4.24	$4.37	$5.99
Laundromats, self-service & Dry Cleaning	$113.27	$116.67	$120.17	$164.63
Industrial Laundry	$205.85	$212.03	$218.39	$299.19
Car Washing Facilities	$113.27	$116.67	$120.17	$164.63
Canner Operations	$113.27	$116.67	$120.17	$164.63
Restaurants, Taverns (first 20 person capacity)	$47.17	$48.59	$50.04	$68.56
Restaurants, Taverns (each additional 5 person capacity)	$3.61	$3.72	$3.83	$5.25
Schools Summer Rate	$61.74	$63.59	$65.50	$89.73
Schools Sept. May (each occupant)	$1.75	$1.80	$1.86	$2.54
Nursing Homes, Convalescent Center base charge	$28.85	$29.72	$30.61	$41.93
Nursing Homes, Convalescent Center each patient bed available	$5.59	$5.76	$5.93	$8.12
Service Station	$32.95	$33.94	$34.96	$47.89
Churches, municipal parks & buildings	$37.08	$38.19	$39.34	$53.89
Theaters, large stores, banks, medical & Dental clinics, mortuaries & beauty shops	$37.82	$38.95	$40.12	$54.97
Fraternal Halls, per floor	$53.55	$55.16	$56.81	$77.83
Business offices, small stores & optometrist	$26.87	$27.68	$28.51	$39.05
State Parks Restroom Facilities	$79.92	$82.32	$84.79	$116.16

New gravity lines, pump stations, and force mains that are necessary to serve new development will be primarily developer-funded. However, costs for the main trunk lines and any necessary lift stations are included in the City's Capital Improvement Plan (CIP) The City may elect to build these improvements and charge development for them

[17] City of Long Beach, Ordinance No. 778. Section 4, Sewer Rates and Charges. Long Beach Washington.

through latecomer fees18. Facilities for existing areas that are not currently served may be built by forming a Local Improvement District (LID).

The maximum flow is expected to increase by 15 percent during the 20-year design period. The current maximum flow is 1.2 million gallons per day, following the 2003-04 upgrade to the wastewater treatment plant.

8.9.i. COLLECTION SYSTEM ALTERNATIVES

The majority of the growth within the city is assumed to occur in the dune area to the west of Ocean Beach Boulevard and to the north of Pioneer Road. These areas currently have limited service by sanitary sewers and are connected to the city system via private systems including grinder pumps and pressure mains. In chapter 7 of the referenced Plan, collection system alternatives and improvements are recommend to serve existing sewer customers and future development.[19]

8.9.j. WATER REUSE OPTIONS

There are no plans or projects in regards of this option. However the Sewer System Comprehensive Plan presents a possible strategy using a non-potable source at the treatment plant. The necessary upgrades to the treatment plant in order to achieve this option are presented in the referenced Plan[20].

8.9.k. EFFLUENT DISPOSAL ALTERNATIVE

The City's plan for effluent disposal is to continue the discharge to Willapa Bay via Tinker Lake.

8.10 Water System [21]

The City of Long Beach currently serves about 1,860 connections including approximately 792 residential and 271 non-residential connections within the city limits, and approximately 682 residential and 115 non-residential connections outside city limits.

The average daily residential water use is 108 gallons per residential connection. Water usage has been approximately 48 percent residential and 52 percent non-

[18] City of Long Beach, Sewer Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 7 *Collection System Improvements and Expansion.*
[19] Ibid
[20] City of Long Beach, Sewer Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 10 *Wastewater Treatment Plant Improvements.*
[21] This summary is based on the Comprehensive Water System Plan, prepared by Gray & Osborne, Inc. Consulting Engineers in April 2005. Updates were made from interviews with staff thanks to the aid of David Glasson.

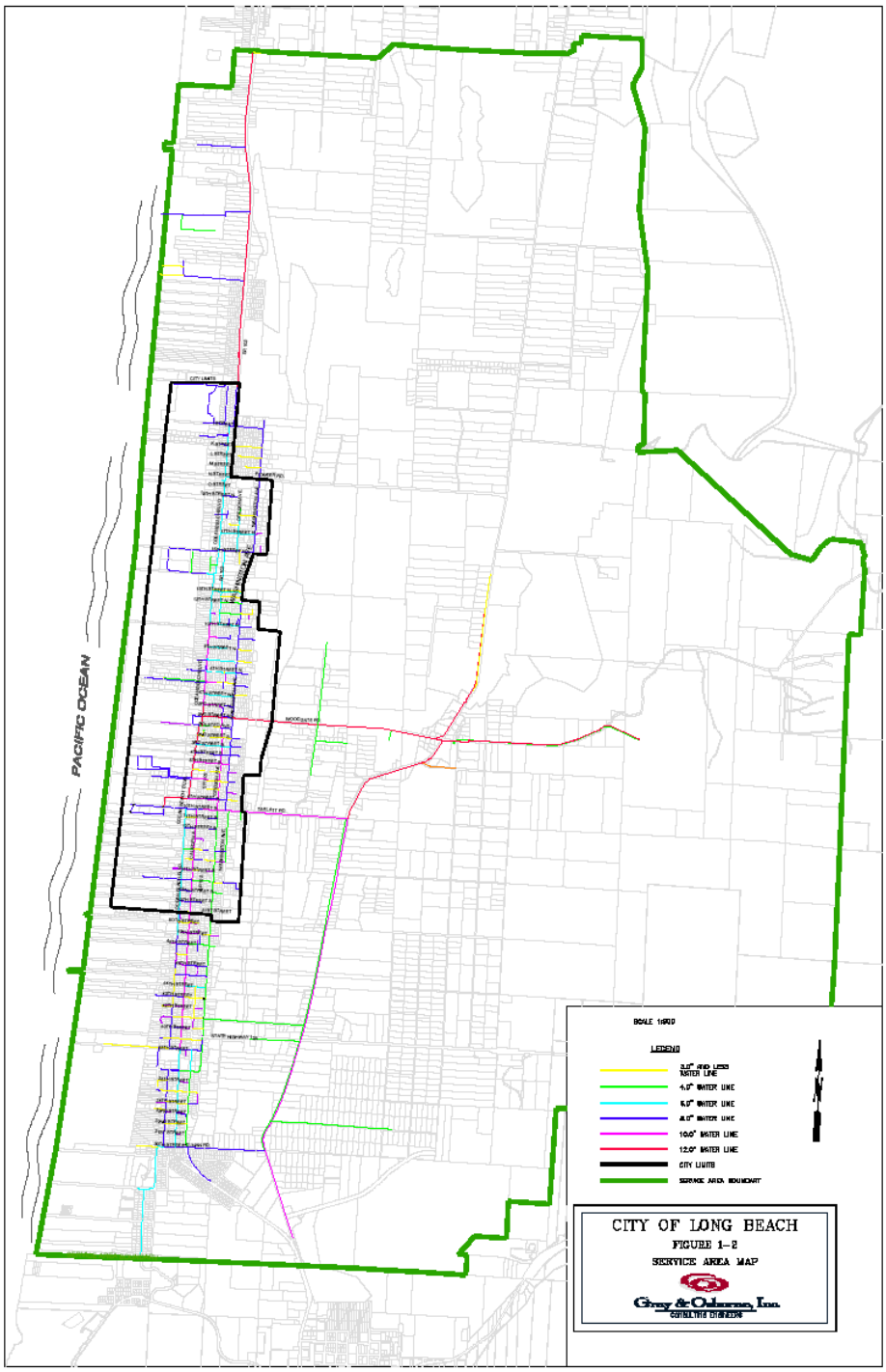
residential. The largest single users are two motels with 3-inch water meters; together, they account for 5.2 percent of all water use.

Annual water production has ranged from 254 million gallons (MG) in 1997 to 164 MG in 2002. The reduction is due to more efficient operation of the treatment plant. The water system has grown at an annual rate of approximately 1.54 percent over the past 10 years and is projected to continue growing at the same rate. Annual water demand is projected to increase from 176 MG in 2005 to a projected 239 MG in 2025.

8.10.a. SOURCE OF SUPPLY

The City of Long Beach pumps and treats raw surface water obtained from two impoundments located east of the City: the Yeaton/Baker Impoundment, which has been improved to provide storage of about 10 MG behind the earth fill dam, and the Dohman Creek Impoundment with a current storage capacity of 19 MG. In addition to these two major impoundments an average of 1.9 MG of water from Matticks Creek has been pumped into the Yeaton/Baker Reservoir during the summer months to augment storage. Another source, as yet undeveloped, is Riekkola Creek. The City does not currently utilize any groundwater wells as source of supply.

Figure E-34: Long Beach Water Service Area



8.10.b. BOOSTER PUMP SYSTEM

A booster pump station is located near the corner of 67th Place and Sandridge Road.

8.10.c. TRANSMISSION SYSTEM

The transmission system consists of two sections: transmission of raw water from the impoundments to the treatment plant and transmission of treated water from the storage reservoirs to the distribution grid. The finished water transmission line runs from the storage reservoir to the booster pump station. The existing distribution system is shown in Figure 1-8 from the Water System Comprehensive Plan from 2005[22].

8.10.d. POPULATION ESTIMATES[23]

Since the City of Long Beach water system service area is not a defined political boundary, there are no OFM population estimates for the area. The OFM estimates the number of persons per household for the City of Long Beach is 1.9 persons per household. However, based on residential water connections within city limits for 2002 and OFM population estimates, there were actually 1.7 persons per residential water meter.

The average population growth for the ten-year period from 1993 to 2002 was 1.54 percent. This growth rate is used to calculate future water system demands.

Seasonal and transient population are not estimated in this analysis. Water use by seasonal and transient population is represented by the water use record. Seasonal and transient water use will be assumed to grow proportionally with all other water use.

8.10.e. PROJECTED POPULATION GROWTH AND SYSTEM CONNECTIONS REQUIREMENTS.

The average annual growth rate over the past 10 years has been 1.54 percent. That growth rate is used to project future population growth in Figure E-35.

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[22] City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 1 *Water System Description.*

[23] In a memorandum in August 2005, and by request of the City, a second analysis with an aggressive rate of 5% population increase was made. With the higher rate, additional instantaneous water rights would be needed by 2006 instead of 2015. Additional water treatment capacity would be needed by 2006 instead of 2015 and additional storage would be needed by that same year.

Figure E-35: Projected Population[24]

YEAR	PROJECTED SERVICE AREA POPULATION*	PROJECTED TOTAL CONNECTIONS
2003	2,532	1,889
2004	2,571	1,918
2005	2,611	1,948
2006	2,651	1,978
2007	2,692	2,008
2008	2,734	2,040
2009	2,776	2,071
2010	2,818	2,102
2015	3,042	2,269
2020	3,284	2,450
2025	3,544	2,644

**From Water System Comprehensive Plan; may differ from actual population projections for planning period*

Only a few customers located between the booster pump station and the reservoir are not served by the booster station. The existing booster pump station can supply peak hour demands and fire flow demands. It is projected to maintain 30 psi throughout the six-year planning period and 20 psi throughout the twenty-year planning period.

8.10.f. SOURCE CAPACITY

The recommended capacity to meet projected maximum day demand within 18 hours of pumping will exceed the existing source capacity by the year 2015. If allowed to pump 24 hours per day, projected maximum day demand through 2025 can be met.

8.10.g. STORAGE CAPACITY

Projected Water Production Requirements are presented on Figure E-36 of the 2005 Water System Plan.

[24] Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 2. *Basic Planning Data*

Figure E-36: Water Production Requirements[25]

YEAR	PROJECTED SERVICE AREA POPULATION*	AVERAGE DAY PRODUCTION REQUIREMENT GPD
2003	2,532	468,500
2004	2,571	475,700
2005	2,611	483,100
2006	2,651	490,500
2007	2,692	498,100
2008	2,734	505,800
2009	2,776	513,600
2010	2,818	521,400
2015	3,042	562,800
2020	3,284	607,600
2025	3,544	655,700

**From Water System Comprehensive Plan; may differ from actual population projections for planning period*

With a projected population of 3,544 by 2025, storage capacity will not become a limiting factor. Figure E-37 shows affective storage requirements for the City of Long Beach compared to current effective storage capacity and indicates a future storage surplus through the year 2025.

Figure E-37: Water Storage Requirements[26]

YEAR	EFFECTIVE STORAGE REQUIREMENT (GALLONS)	AVAILABLE EFFECTIVE STORAGE (GALLONS)	STORAGE SURPLUS/DEFICIT (GALLONS)
2007	974,600	1,504,000	529,400
2008	983,700	1,504,000	520,300
2009	992,600	1,504,000	511,400
2010	1,001,500	1,504,000	502,500
2015	1,049,500	1,504,000	454,500
2020	1,101,300	1,504,000	402,700
2025	1,156,900	1,504,000	347,100

[25] Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 2. *Basic Planning Data*

[26] Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 3. *System Analysis*

8.10.h. SYSTEM CAPACITY LIMIT

Figure E-38 summarizes ERU (Equivalent Residential Unit) limits base on the various limiting factors evaluated in the Water System Comprehensive Plan 2005. Source capacity to meet system demands in 18 hours of water production is the current system-limiting factor, followed by instantaneous water rights to meet system demands in 18 hours of water production. Existing storage capacity and annual water rights are not currently limiting factors.

Figure E-38: Water System Capacity Limits[27]

LIMITING FACTOR	ERU LIMIT
Source Capacity, 18 hr/day	4,890
Instantaneous Water Rights, 18 hr/day	5,124
Source Capacity, 24 hr/day	6,520
Instantaneous Water Rights, 24 hr/day	6,832
Existing Storage Capacity	7,730
Annual Water Rights	7,960

8.10.i. PEAK HOUR ANALYSIS

According to WAC 246-290, a water system must maintain a minimum pressure of 30 psi in the distribution system under peak hour demand conditions. Peak Hour Analysis for 2010 and 2025 revealed no system deficiencies. The minimum system pressure under Peak Hour Conditions occurs at Washington Avenue and 18th Street North.

8.10.j. AVAILABLE FIRE FLOW ANALYSIS

The Washington Department of Health Water System Design Manual states that a water system should be designed to provide adequate fire flow under maximum day demand conditions while maintaining a minimum system pressure of 20 psi.

Based upon fire flow model runs, the City's water system cannot currently meet the fire flow requirements in several areas. Figure E-39 illustrates these deficiencies. Line upsizing is included in the 2006 6-year plan.

[27] Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 3. *System Analysis*

Figure E-39: Areas with Fire Flow Deficiencies[28]

MAP REFERENCE AREA[29]	REQUIRED FIRE FLOW (GPM)	AVAILABLE FIRE FLOW IN 2010 (GPM)	MEETS FIRE FLOW REQUIREMENT?	CAUSE OF DEFICIENCY
Area A	1,000	650 – 850	NO	DEAD END WATER MAINS, UNDERSIZED TRANSMISSION MAIN.
Area B	1,000 – 1,500	850 – 1,000	NO	DEAD END WATER MAINS, UNDERSIZED TRANSMISSION MAIN.
Area C	500	600 – 750	YES	NONE
Area D	500	580 – 750	YES	NONE
Area E	1,000 – 1,500	970 – 1,180	NO	UNDERSIZED TRANSMISSION MAIN.
Area F	1,000 – 1,500	1,100 – 1,300	NO	UNDERSIZED TRANSMISSION MAIN.
Area G	1,500	1,450 – 2,000	YES	NONE
Area H	1,000	1,150 – 1,800	YES	NONE
Area I	1,000	1,880 – 2,100	YES	NONE
Area J	1,000	750 – 1,250	NO	INSUFFICIENT LOOPING
Area K	1,500	1,500 – 2000	YES	NONE
Area L	1,500	1,250 – 1,450	NO	INSUFFICIENT LOOPING, UNDERSIZED DISTRIBUTION MAINS.
Area M	1,000	1,050 – 1,300	YES	NONE
Area N	1,000 – 1,500	1,050 – 1,250	NO	UNDERSIZED TRANSMISSION MAIN.

8.10.k. CONNECTION CHARGE

As of 2007 and per Ordinance 779 (December 1, 2003), water connection capital charges are $2500.00, with an additional hookup fee charge of $2,500.00 per unit for multi-unit residential developments. The unit or units chargeable in addition to the basic charge are as set out below. The unit fee consists of $1,250.00 for water hookup. The unit fee for water for hotel/motels is $875 for each additional rentable unit. The installation fees are presented in Figure E-40.

[28] Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 4. *Hydraulic Modeling*

[29] Figure 4-1 from the Water System Comprehensive Plan, presents the reference map of these deficiencies.

Figure E-40: Hookup Units[30]

Single Family Dwelling	1 UNIT
Multiple Family Dwellings	1 UNIT PER LIVING UNIT
Schools	1 UNIT PER 20 STUDENTS
Motels and Hotels	1 UNIT PER RENTABLE UNIT
Motel and Hotel Laundry Rooms	1 UNIT PER 2 WASHERS
Mobile Home/RV Parks	1 UNIT PER 2 TRAILER SPACES
Laundry/recreational-Mobile/RV Parks	1 UNIT PER 2 WASHERS
Restaurant	1 UNIT PER 10 SEAT CAPACITY
Hospital and other institutions	1 UNIT PER 3 BEDS
Commercial and Industrial	1 UNIT PER 9 EMPLOYEES OR FRACTION THEREOF.
Launderette	1 UNIT PER 2 WASHERS
Auto Service Station	2 UNITS
Car Wash	4 UNITS FOR EACH 3 STALLS OR FRACTION THEREOF.
Public Meeting Places (includes theaters and churches)	1 UNIT PER 200 SEAT CAPACITY
Any users not defined above	TO BE SET BY DIRECTOR OF PUBLIC WORKS SUBJECT TO APPROVAL OF THE COUNCIL.

In addition to the Water Connection fee, Water Installation fees for parts, labor and equipment are charged as follows (2007):

- Labor is figured @ $18.75 per hour
- Parts are sold at city cost
- Backhoe is figured @ $56.25 per hour
- Push Machine is figured @ $37.50 per hour
- Any unusual cost assessed by the Director of public works
- Hourly rate is figured as the time the labor and/or equipment is at the job site rounded to the nearest 15 minutes.

8.10.l. RATES

The rates and charges for water service to lots connected to the water system within the corporate limits of the city are fixed and established by Ordinance No. 778 (December 1, 2003) as follows:

The minimum monthly rate charge is based on meter size per the following schedules:

[30] City of Long Beach, Ordinance No. 779. Long Beach Washington.

Figure E-41: Water Service Monthly Charge Inside City Limits[31]

METER SIZE	2003	2004	2005	2006
Residential 3/4 1"	$18.60	$19.16	$19.73	$20.32
Commercial 3/4 1"	$22.12	$22.78	$23.47	$24.17
Commercial 1.5"	$26.30	$27.09	$27.90	$28.74
Commercial 2"	$38.00	$39.14	$40.31	$41.52
Commercial 3"	$51.63	$53.18	$54.77	$56.42

Figure E-42: Water Service Monthly Charge Outside City Limits[32]

METER SIZE	2003	2004	2005	2006
Residential 3/4 1"	$27.90	$28.74	$29.60	$30.49
Commercial 3/4 1"	$33.18	$34.18	$35.20	$36.26
Commercial 1.5"	$39.45	$40.63	$41.85	$43.11
Commercial 2"	$57.00	$58.71	$60.47	$62.29
Commercial 3"	$77.45	$79.77	$82.17	$84.63

8.10.m. COMMODITY CHARGE.

The monthly commodity charge (or excess rate) is charged for each 100 cubic feet of water in excess of the 400 cubic foot minimum allowed per month thereof, as follows:

Figure E-43: Commodity Charge Inside City Limits[33]

	2003	2004	2005	2006
Subservice Charge	$1.95	$2.01	$2.07	$2.13
Nursing Home / Bed	$0.74	$0.76	$0.79	$0.81
Commodity / 100 cu ft.	$3.33	$3.43	$3.53	$3.64

[31] City of Long Beach, Ordinance No. 778. Section 2, Water Rates and Charges. Long Beach Washington.
[32] Ibid.
[33] Ibid.

Figure E-44: Commodity Charge Outside City Limits[34]

	2003	2004	2005	2006
Subservice Charge	$2.93	$3.02	$3.11	$3.20
Nursing Home / Bed	$1.12	$1.15	$1.19	$1.22
Commodity / 100 cu ft.	$3.33	$3.43	$3.53	$3.64

8.10.n. CAPITAL IMPROVEMENT PROGRAM

WATER SUPPLY SOURCE

Current installed pumping capacity does not match instantaneous water rights for individual sources. To remedy this situation, the City will file a change application with the Department of Ecology to increase allowable instantaneous withdrawal.

By 2015, additional instantaneous water rights will be required. Since the process for obtaining additional water rights can take time, the City will begin the process during this 6-year planning period.

Storage capacity and treatment plant efficiency has been increased, thereby reducing the need for raw water pumping capacity. The two 30-horsepower pumps are adequate at this time, producing 525 gpm, but could be increased in size if needed to produce the maximum capacity of 673 gpm.

WATER TREATMENT

- Additional Treatment Capacity

Between 2010 and 2015 additional water treatment capacity would be required. By 2025, it is projected that the water treatment plant will need to increase capacity to 1.85 MGD. Improvements on the process of sedimentation, filtration and disinfection would satisfy the expected requirements. The City has plans on making the proposed upgrades to the plant by 2007.

- Additional Laboratory/Office Space

To provide additional space at the water treatment plant, the City plans to construct a new building to the west of the existing utility building. The new building would be approximately 600 to 800 square feet.

BOOSTER PUMP STATION

The booster pump station will be provided with auxiliary power. Since there is not an electrical substation in the vicinity of the booster station, providing a second power feed is not a practical alternative. A

[34] Ibid.

diesel powered auxiliary generator is recommended at the booster station for continuity of operations and maintenance activities.

8.10.o. WATER DISTRIBUTION

Deficiencies generally consist of undersized water mains or areas with dead ends or inadequate looping. In the previous water system plan, reservoirs at the north and south end of the distribution system had been contemplated to improve fire flow in these areas. However, the City has elected not to build storage in these areas due to the lack of elevation and aesthetic concerns with elevated tanks. The City instead elected to construct new storage towards the east end of the City near the existing reservoir. As a result, improvements to correct the deficiencies focus on increasing main sizes and looping dead-end water mains.

Figure E-45: Capital Improvement Schedule (Prioritized)/Source[35]

CLARIFY EXISTING WATER RIGHTS	2005
Replace Finished Water Pumps	2005
Obtain Additional Instantaneous Water Rights	2006
Stage 1 DBPs sampling	2006
Cross Connection Control Surveys	2006
Negotiate MOU with commercial timber owners	2006
Post signs at all entrances to watershed/emergency phone numbers	2006
Link with Willapa Bay National Wildlife Refugee	2006
Public Works Director to review all Forest Project Applications	2006
Additional Raw water pumping capacity	2007
Additional Treatment Capacity	2007
Additional Laboratory	2007
Algae control	2007
Upgrade Chlorination Facilities	2007
Improve Backwash Basin Discharge	2007
Install new control system	2007
Install a 50 kW auxiliary generator	2007
Maintain a current watershed activity file	2007
Install 300 LF of 8 inch water main on 28th street NW	2008
Replace 70 LF of 4 inch with 12 inch water main on Bolstead across Ocean Beach	2009
Install 4,750 LF of 6 inch with 12 inch water main on Ocean Beach Boulevard	2009
Install 300 LF of 8 inch water main on 6th Street North across SR 103	2010
Replace 1,000 LF of 2 inch ad 4 inch with 8 inch water main on 17th Street South	2011
Install 430 LF of 8 inch water main on 18th Street South	2011
Replace 530 LF of 3 inch with 8 inch water main on 43rd Street South	2011
Replace 820 LF of 2 inch, 4 inch and 6 inch water main on 32nd Street South	2011
Update Water Comprehensive Plan	2011
Implementation of Conservation Program	2006-2011
Consumer Confidence Report	2006-2011

[35] Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer.

8.11 Stormwater Management[36][37]

The corporate limits of the City of Long Beach encompass approximately 700 acres. The city is divided into 4 main stormwater basins and 9 sub basins. Figure E-46 and Figure E-47 illustrate these and their drainage flows.

Figure E-46: Drainage Basins Description[38]

BASIN	AREA	DRAINAGE/FLOW
South Main Basin	100 acres	Drains south to the Pacific Ocean
East Main Basin	200 acres	North and East to the Willapa Bay
	80 acres	Drains to a pump station that discharges to the Pacific Ocean
West of the Secondary dune	300 acres	Discharge to the Pacific Ocean

[36] This summary is based on the Stormwater Management Plan, prepared by Gray & Osborne, Inc. Consulting Engineers in March 1998. Updates were made from interviews with staff thanks to the aid of David Glasson.
[37] The City is preparing an update of the Stormwater Management Plan in 2007.
[38] Source: City of Long Beach Stormwater Management Plan. March 1998 Gray & Osborne, Inc. Consulting Engineer. Chapter 2. *Planning Area Characteristics.*

Figure E-47: Drainage Sub-Basins Description[39]

SUB BASIN	AREA	LOCATION	DRAINAGE/FLOW
1	37 acres	16th street North to 26th Street N and between SR 103 and Washington St.	Towards Pioneer Road and then eastward along Pioneer Road to a ditch leading into the East Main Channel
2	30 acres	Between 10th St N. and 16th St. N, and east of SR 103	To the East Main Channel from an outfall located between 12th St N and 13th St. N
3	25 acres	10th St N to 3rd St N east of SR 103	Southward along Washington St to 7th St N eastward on 7th St N and then southward on Oregon St to the pump station at 3rd St N
4	24 acres	Between 5th St S and 3rd St N and east of SR 103	Along Oregon Street and are conveyed northward to the pump station at 3rd St N
5	22 acres	5th St S to Sid Snyder Drive and east of SR 103	Along Oregon Street to Sid Snyder Drive and discharges into the east-west main on Sid Snyder Drive
6	25 acres	From 20th St S to Sid Snyder Drive and roughly between California St and the crest of the dune west of Ocean Beach Boulevard	Northward along California to the east-west main on Sid Snyder Drive and then to the South Main
7	22 acres	20th St S to Sid Snyder Drive between California and Washington Streets	Northward along SR 103 to the east-west main on Side Snyder Drive and then to the South Main Channel
8	74 acres	2nd St to about milepost 2.93 on SR103 and between SR 103 and the crest of the dune of Ocean Beach Blvd.	Along SR103 and the crest of the secondary dune westward on 12th St N to the pump station on the west side of Ocean Beach Blvd
9	8 acres	Along Ocean Beach Blvd from Bolstad Avenue to Sid Snyder Drive	Drainage is confined to the basin where it infiltrates.

[39] Ibid.

Figure E-48: Precipitation Totals[40]

STORM	PRECIPITATION (INCHES)
6 month/24 hour	1.9
2 year/24 hour	3.0
10 year/24 hour	4.5
35 year/24 hour	5.0

Figure E-49: Projected Population[41]

YEAR	POPULATION*
1995	1,365
2000	1,394
2005	1,434
2010	1,476
2015	1,520
2020	1,565
2025	1,611

**From Stormwater Management Plan 1998; may differ from actual population projections for planning period.*

8.11.a. SYSTEM PROBLEMS

- Drainage Basin 1 – There have been no observations of flooding. Problems are primarily related to pipe sizes.
- Drainage Basin 2 - An area of concern is the trailer park located north of 15th Street North. Residents of the trailer park indicated that the area floods to a depth of one foot or more during large precipitation events.
- Drainage Basin 3 – Pipes between 4th Street North and 5th Street North are inadequate to convey flows predicted for the 10-year design. Flooding upstream of this point has not been confirmed
- Drainage Basin 4 – The majority of the pipe sections along Oregon Avenue are inadequate for the 10-year design. Two sections were also shown to be inadequate for the 2-year design, with the most severe restriction occurring at the 12-inch culvert under 2nd Street

[40] Ibid.
[41] Ibid.

N. There have been no confirmation of specific flooding or ponding problems.

- Drainage Basin 5 – No reports of flooding along Oregon Avenue were received. However, the City reported ponding problems along Washington Avenue between 5th Street South and Sid Snyder Drive.
- Drainage Basin 6 – No mention of flooding has been received. However, the area is primarily an older residential neighborhood, and the California Avenue system is an older, shallow system of 8-inch and 12-inch pipes laid at very shallow slopes. Due to the small pipes and the shallow pipe gradients, the entire system is indicated in the model as inadequate.
- Drainage Basin 7 – Ponding problems on SR 103 have not been reported. However, vacant lots along SR103 accumulate large ponds during relatively minor rain events. The existing conveyance system was installed as part of a paving project in 1992 by Washington State DOT. The DOT report indicates that the system was sized for the roadway only. As the area develops commercially, the pipes between 14th Street South and Sid Snyder Drive are inadequate to convey the predicted flows for the 10-year design.
- Drainage Basin 8 –As with Basin 7, the paving project from DOT did not account for the larger basin area. With the assumption that the area will develop commercially, the model indicates that the pipes downstream of 10th Street North and 17th Street North are inadequate to convey the predicted flows for the 10 year design. Ponding has been reported in lots adjacent to SR103 and along Ocean Beach Boulevard during relatively minor rain events.
- Drainage Basin 9 – The City has indicated that ponding regularly occurs along Ocean Beach Boulevard during the wet months.
- 12th Street North Pump Station – The pump station has insufficient pumping capacity to handle the predicted flows for the 10 year design. The station can incorporate an additional pump, but currently there are no plans to expand its pumping capacity.

The City identified 4 specific areas where drainage problem exists:

- The high tailwater conditions in the South Main at the point where the Side Snyder Drive interceptor discharges
- Shortage capacity at the 3rd Street North pump station.
- Ponding along Ocean Beach Blvd north of Sid Snyder Drive and most noticeably between Side Snyder Drive and Bolstad Avenue.

- Ponding along Washington Avenue in the vicinity of 5th Street South to Sid Snyder Drive.

8.11.b. CAPITAL IMPROVEMENT PROGRAM PLAN

The following assumes that new development and redevelopment will not be required to infiltrate or provide detention facilities.

Figure E-50: Capital Improvement Program Alternative 1

PROJECT	YEAR	LOCATION
1	1998/ 2000	11th St from Oregon Ave to California Ave; pump station at 11th S; force main to Pacific Ocean; Oregon Ave from 5th Street S to Sid Snyder Drive
2	1998	Ocean Beach Blvd from Bolstad to 10th Street N
3	2004	Oregon Ave from 5th Street N to 4th Street S; pump station at 3rd Street N; force main to East Main
4	2006	Oregon Ave from 18th Street N to Pioneer Road; Pioneer Road to East Main
5	2007	Pump Station at 12th Street N; force main to Pacific Ocean
6-1	2010	Ocean Beach Blvd from 10th Street N to 16th Street N
6-2	2012	Ocean Beach Blvd from 2nd Street N to 10th Street N
7	2014	Basin 2 outfall to East Main
8	2016	Washington Avenue from 14th Street S to 11th Street S
9	2018	California Avenue from 18th Street S to Sid Snyder Drive

Source:

8.11.c. CIP ALTERNATIVE 2

The primary difference between the two alternatives is in how runoff from Basins 3 and 4 is handled. In alternative 1, the pump station at 3rd Street North is retained and the runoff from Basin 3 and 4 continues to be discharged to the East Main. In alternative 2, the 3rd Street North pump is eventually abandoned and flows from Basins 3 and 4 are routed to the proposed 11th Street interceptor.

8.11.d. SYSTEM IMPROVEMENTS

- At time of publication (Winter 2007), there have been recent upgrades to the system that have solved some of the problems described above:
- At the 3rd Street Stormwater Pump Station, staff installed a 30hp Flygt pump, model 3201, at a rate of 3200 g.p.m. In addition, a 21-inch force main from the station to the ocean was installed.
- At 11th South Ocean Beach Boulevard the city installed a new Stormwater Pump Station with 2 Flygt pumps. Also, a 21-inch

force main from the station to the ocean was installed that enables capture of stormwater on the south end of town.

- To help drain the water problem on California Avenue, the city installed a 12-inch culvert down 11th Street South from California Avenue to the Stormwater Pump Station.
- The City installed an 18-inch main line along Ocean Beach Boulevard from 11th Street South to 19th Street South.
- To alleviate problems along Washington Avenue, the city installed a 12-inch main line from 2nd St North to Sid Snyder Drive.

8.11.e. SERVICE CHARGES

The City of Long Beach formed a stormwater utility in 1993. The utility collects a monthly service charge from existing developed property. The utility collects $3.75/month per Equivalent Residential Unit (ERU). The number of ERUs in 1995 was 1,389. In addition the utility collects a connection charge of $190/ERU when undeveloped property develops.

Figure E-51: Stormwater Service Fees, Long Beach

	2003	2004	2005	2006
Residential	$7.80	$7.80	$8.03	$8.27
Commercial per/ERU)	$7.80	$7.80	$8.03	$8.27

Source:

The Equivalent Residential Unit (ERU) is equal to 3,600 square feet.

8.12 Summary of Issues

Long Beach Capital Facilities are well-positioned to accommodate projected population in the city. Several outstanding issues that will have to be addressed are extending sewer service to the northeast corner of the city. This may require unique financing mechanisms such as Local Improvement District for the properties in that area. There is also the challenge of adequately servicing new developments in the northwest Shoreline area with stormwater service. The lack of a public community gathering place such as meeting rooms appears to be a priority for stakeholders. There also appears to be interest in concentrating public facilities and services into a Civic Campus. Other cities have found that such "civic" investments go along way to creating a sense of place while enhancing customer service and building civic pride.

9. UTILITIES

9.1 Power Supply

The Pacific County Public Utility District No. 2 (PUD), formed in 1936, serves all of Pacific County with the exception of the Grayland-North Cove-Tokeland area, which is served by the Grays Harbor County P.U.D. on their own lines and on lines leased from the P.U.D. No. 2, and an area in the east that is served by Lewis County P.U.D. The majority of the power is hydroelectric, purchased from the Bonneville Power Association.

The P.U.D. operates a 12.5 k.V four wire multi-grounded distribution system, both overhead and underground. The utility is a full requirements purchaser of electricity from the Bonneville Power Administration.

The Pacific County P.U.D. owns and maintains eight substations throughout the county. The substations and their capacities are:

- Valley Substation 5/6.25 Mva
- Henkle Street Substation 15/20.1 Mva*
- Skidmore Substation 12/16/20 Mva*
- Naselle Substation 5 Mva
- Hagen Substation 10/12.5 Mva
- Long Beach Substation 12/16/20 Mva*
- Ocean Park Substation 15/20/25 Mva
- Oysterville Substation 20 Mva

**BPA transformers, P.U.D. delivery @ 12.5 Kv.*

9.2 Telecommunications

The telecommunications services provided to the City of Long Beach are cable television and telephone services.

CenturyTel provides telephone services to the City and surrounding areas. There are three exchanges on the Long Beach Peninsula (Ocean Park, Long Beach and the Chinook exchanges). The Long Beach exchange, which includes the City of Long Beach, the City of Ilwaco and the surrounding areas has 3,475 hookups with a growth rate of 4.4%

Cable television service in the City is provided by Charter Cable Company.

9.3 Solid Waste

The City contracts with Peninsula Sanitation Service to operate a solid waste collection service in the City. The waste is collected and transported to a transfer station on 67th Street east of the City, operated by Pacific Solid Waste Disposal Inc.

Pacific Solid Waste Disposal also operates a recycling system at the transfer station in the City. The company sorts incoming waste for recyclable materials and also offers buy-back service to the public on a limited basis. Materials recovered include glass, aluminum ferrous metal, newspaper, cardboard, computer paper, plastic and automobile batteries.

9.4 Summary of Issues

There are opportunities for the city to reduce its financial outlay by developing standards for reducing waste in its energy consumption (particularly electricity for water and sewage treatment and street and public facility lighting). The city's location on the coast makes it ideal for exploring renewable energy such as wind or wave power. If positioned appropriately, this would become a revenue source for the city. There are also opportunities for savings by not only separating bio-waste from non-biodegradable waste in its solid waste collection system. Many cities have partnered with private companies to provide citywide wi-fi services as a tourist amenity. Therefore investing in the city's utilities can actually bolster the city's economy.

F. SEPA Review

G. Implementation Strategies

H. Reference Tables

Figure H-1: Projections of Total Resident Population for the Growth Management Act

INTERMEDIATE SERIES: 2000 T0 2025 (RELEASED JANUARY 2002)

	2000	2005	2010	2015	2020	2025
State	5,894,121	6,233,345	6,648,112	7,096,501	7,545,269	7,975,471
Adams	16,428	17,458	18,502	19,724	20,919	22,063
Asotin	20,551	21,466	22,582	23,569	24,650	25,671
Benton	142,475	151,522	161,236	169,528	177,388	184,818
Chelan	66,616	71,169	75,993	81,056	85,864	90,461
Clallam	64,179	64,969	67,754	70,769	74,349	77,749
Clark	345,238	391,264	432,479	473,674	509,876	544,809
Columbia	4,064	3,914	4,000	4,150	4,126	4,092
Cowlitz	92,948	98,764	107,903	117,163	126,797	136,114
Douglas	32,603	36,257	39,196	42,302	44,920	47,428
Ferry	7,260	7,901	8,384	8,827	9,429	10,008
Franklin	49,347	52,642	56,392	60,216	64,687	68,997
Garfield	2,397	2,436	2,510	2,596	2,668	2,734
Grant	74,698	82,397	88,331	92,806	95,715	98,395
Grays Harbor	67,194	66,490	68,878	71,761	74,605	77,269
Island	71,558	74,738	80,650	87,416	94,365	101,079
Jefferson	26,299	28,308	30,892	34,067	37,483	40,807
King	1,737,034	1,786,803	1,861,042	1,940,385	2,018,824	2,092,390
Kitsap	231,969	236,403	257,841	281,883	307,113	331,571
Kittitas	33,362	34,314	36,742	39,451	41,776	43,999
Klickitat	19,161	20,338	21,626	23,071	24,493	25,855
Lewis	68,600	73,005	77,493	81,251	86,070	90,678
Lincoln	10,184	10,095	10,386	11,004	11,918	12,802
Mason	49,405	53,789	58,604	64,007	69,635	75,088
Okanogan	39,564	41,458	44,061	46,315	47,920	49,410
Pacific	20,984	20,957	21,257	21,725	22,228	22,678
Pend Oreille	11,732	12,679	13,674	14,711	15,706	16,662
Pierce	700,820	740,838	788,580	840,557	892,454	942,157
San Juan	14,077	15,480	17,316	19,168	20,877	22,534
Skagit	102,979	113,136	123,807	135,717	150,449	164,797
Skamania	9,872	10,483	11,068	11,731	12,344	12,927
Snohomish	606,024	666,735	728,957	793,720	862,599	929,314
Spokane	417,939	441,068	466,417	496,981	529,958	561,627
Stevens	40,066	42,105	46,585	52,102	58,154	64,057
Thurston	207,355	234,053	258,687	286,449	312,029	336,825
Wahkiakum	3,824	3,906	4,169	4,406	4,745	5,072
Walla Walla	55,180	57,475	60,030	62,398	64,856	67,158
Whatcom	166,814	180,463	195,504	213,246	230,228	246,636
Whitman	40,740	40,445	41,149	42,342	43,651	44,856
Yakima	222,581	225,622	237,435	254,257	269,401	283,884

Source: OFM/Forecasting 1/25/02

Figure H-2: Residential Home Sales in Long Beach Washington (1/1/06-10/27/06)

ML#	Address	SF	Price
4010627	1407 S IDAHO	884	$66.600
6037779	206 24TH ST	930	$80.000
5028459	1700 N OREGON	1,056	$92,000
N26139369	322 11TH ST, N	1,248	$92.000
5062086	311 7TH SE	640	$95.000
5061917	2407 N WASHINGTON	1,779	$100,000
6033781	110 NE 16TH ST	1,440	$117.000
6063228	323 S 8TH ST	192	$120.000
6007873	1705 OREGON ST	884	$120,000
6017489	309 E 11TH ST	736	$126.000
5075400	106 8TH ST SE	606	$129.000
N25173570	13111 SANDRIDGE	1,440	$130,000
N26086939	1502 177TH ST	1,100	$135.000
N25124829	18901 SANDRIDGE RD	1,200	$136.500
6031245	1212 IDAHO AVE	992	$149,500
6032004	601 S WASHINGTON ST	1,221	$150.000
6045545	510 WASHINGTON AVE	1,221	$157.000
6013124	5305 SANDRIDGE RD.	1,348	$160,000
6037062	1101 CALIFORNIA	1,106	$166.000
6024776	306 NE 6TH ST	1,012	$167.000
5092317	208 17TH ST	1,876	$170,000
6003267	1617 S WASHINGTON ST	1,188	$171.000
N25146602	311 SID SNYDER RD	1,148	$172.000
5054339	210 NE 6TH ST	1,384	$175,000
6064846	2401 66TH PL	1,095	$180.000
6069334	404 N WASHINGTON ST	2,230	$192.500
6002917	1315 N BOULEVARD	1,424	$195,000
N26142193	504 N PACIFIC WAY	1,000	$200.000
5031326	315 SID SNYDER DR	1,848	$220.000
6013796	6703 V PL	1,920	$223,500
N25179145	803 OREGON AVE, S	NA	$225.000
6007042	2604 SEACREST AVE	1,639	$229.500
6007857	2812 SEACREST LN	1,500	$260,000
6006430	2608 SEACREST LN	1,500	$270.000
6007868	2704 SEACREST LN	1,500	$282.000
6048821	1004 OREGON ST	2,996	$298,000
N25181487	611 WASHINGTON AVE	NA	$299.000
6012615	SEACREST LN	2,000	$340.500
6052979	312 SW 17TH ST	1,920	$344,000
5007466	1205 168TH	3,850	$350.000
6034606	201 SE 19TH ST	3,200	$395.000
5062010	317 5TH ST, N	2,634	$532,500
		AVERAGE	$195,550
		MEDIAN	$170,500
		COUNT	42

This list was compiled from the RMLS and NWMLS reports from 1/1/06 to 10/27/06; RMLS was used as the primary source, supplemented by NWMLS listings, crosschecked for duplicates; ML# with no letter indicates a RMLS listing, while N indicates a NWMLS listing.

Figure H-3: Existing Plan -- Buildable Lands Capacity Analysis

CITY OF LONG BEACH, WA, JANUARY 2007

Proposed Zoning	Current Zoning	Zoning Description	Vacant Land	Coastal Wetlands	NWI Wetlands*	Wetland Buffers	Available Land	- 22% for Parks, Roads etc	- 25% for Market factor	Density	Total Homes		% Permanent Dwelling^^		Resident Population Projection**	
			acres	acres	acres	acres	acres	acres	acres	du/acre	du		du		persons	
											LOW	HIGH	LOW	HIGH	LOW	HIGH
C1	C1	Commercial District	12.76		0.42	0.87	11.48									
	L1	Light Industrial District^	9.32		2.35	1.31	5.67									
		Subtotal	**22.08**		**2.76**	**2.18**	**17.14**									
VC	OT	Old Town District	4.99			0.06	4.93									
	OTW	Old Town West District	5.19	0.81		1.69	2.69									
		Subtotal	**10.18**	**0.81**		**1.75**	**7.62**									
SFR	R1	Single Family Residential	19.06		4.92	0.30	13.84	10.80	8.10	7	57	57	38	38	72	72
	R1MH	Single Family Manufactured	28.13		7.85	1.58	18.71	14.59	10.94	7	77	77	51	51	98	98
	R1R	Restricted Single Family Residential District	17.79		0.34	0.52	16.93	13.21	9.90	7	69	69	46	46	88	88
	S1	Shoreline Single-family Residential District	52.50	8.91	0.03	17.68	25.87	20.18	15.14	4	61	61	41	41	77	77
		Subtotal	**117.48**	**8.91**	**13.14**	**20.08**	**75.35**	**58.77**	**44.08**		**263**	**263**	**176**	**176**	**335**	**335**
HDR	R2	Multi-family Residential District	3.80		0.18	0.41	3.21	2.51	1.88	7-13	13	24	9	16	17	31
	S2	Residential District	45.76	7.95		9.25	28.56	22.28	16.71	4-9	67	150	45	101	85	191
		Subtotal	**49.56**	**7.95**	**0.18**	**9.66**	**31.77**	**24.78**	**18.59**		**80**	**175**	**54**	**117**	**102**	**223**
RES	S3	Shoreline Resort District	15.58	3.99		5.96	5.63									
	S3R	Shoreline Resort Restricted	37.49	4.05		7.99	25.44									
		Subtotal	**53.07**	8.05		**13.95**	**31.08**									
TOTAL			**252.37**	**25.72**	**16.08**	**47.61**	**162.96**				**343**	**438**	**230**	**293**	**437**	**558**

*NOTE:Does not include unincorporated UGA North; * 50% Reduction; ** Assumes 1.9 Persons Per Household (PPH); ^ Includes underused industrially zoned property currently under County Ownership; ^^ Based on an average rate of change 2% increase in owner occupied housing in Long Beach this assumes a rate of 67% occupied*

Figure H-4: Proposed Plan -- Buildable Lands Capacity Analysis

CITY OF LONG BEACH, WA, FEBRUARY 2007

New Zoning	Zoning Description	City Zoning	Shoreline Zoning	Vacant Land (Inland)	Vacant Land (Shore)	Coastal Wetlands	NWI Wetlands*	Wetland Buffers	Available Land	- 22% for Parks, Roads etc	- 25% for Market factor	Density	Total Homes		% Permanent Dwelling^^		Resident Population Projection**	
				acres	acres	acres	acres	acres	acres	acres	acres	du/acre	du		du		persons	
													LOW	HIGH	LOW	HIGH	LOW	HIGH
SFR	Single Family Residential	R1, R1MH		36.92			1.61	1.81	35.21	27.46	20.60	7	144	144	97	97	184	184
			R1R, S1		51.81	8.95	0.06	17.21	34.23	26.70	20.02	4	80	80	54	54	102	102
MDR	Medium Density Residential	R2		5.86				0.03	5.85	4.56	3.42	8-10	27	34	18	23	35	44
			S2		41.34	7.96		9.25	28.76	22.43	16.82	11-14	185	236	124	158	236	300
HDR	High Density Residential	R2		30.69			24.92	0.85	17.81	13.89	10.42	11-14	115	146	77	98	146	186
TOTAL Residential				**73.47**	**93.15**	**16.91**	**26.59**	**29.15**	**121.84**	**95.04**	**71.28**		**551**	**640**	**369**	**429**	**702**	**814**
RES	Resort	S3		0.16		0.01		0.01	0.14									
			S3R		50.63	8.06		13.98	28.59									
NC	**Neighborhood Commercial*** **	C1		**4.57**			**0.49**	**0.39**	**4.13**	**3.22**	**2.42**	8-14	**19**	**34**	**13**	**23**	**25**	**43**
RC	Residential Commercial	C1		6.44			0.34	0.48	5.79									
VC	Visitor Commercial	OT, OTW		10.23		0.81		1.75	7.67									
CI^^	Commercial/Light Industrial	C1, C2, LI		7.93			1.91	1.43	5.55									
P	Public	New		5.65			4.20	0.46	3.09									
REC	Parks, Recreation and Open Space	New																
			S4		1.52				1.52									
	Unknown			0.71					0.71									
					6.07	1.04			5.03									
TOTAL				**78**	**93**	**17**	**27**	**30**	**126**	**98**	**74**		**571**	**674**	**382**	**451**	**726**	**858**

NOTE:

*Does not include unincorporated UGA North; * 50% Reduction - Calculated in Available Land Column; ** Assumes 1.9 Persons Per Household (PPH); *** Assumes some level of residential development in the zone; ^ Redevelopment potential low and not accounted for ^^ Includes currently underused and soon to be vacated industrially zoned land under County ownership*

Figure H-5: Buildable Lands Capacity Analysis

URBAN GROWTH AREA (NORTH ONLY)

New Zoning	Existing Zoning	Zoning Description	Vacant Land	NWI Wetlands*	Coastal Wetlands	Wetland Buffers	Available Land	- 25% for Parks, Roads etc	- 25% for Market factor	Density	Total Homes		% Permanent Dwelling^^		Resident Population Projection**	
			acres	acres	acres	acres	acres	acres	acres	du/acre	du		du		persons	
											LOW	HIGH	LOW	HIGH	LOW	HIGH
SFR	R1, R1MH, R1R, S1	Single Family Residential	107.59	2.14	0.99	4.05	104.46	78.35	58.76	4-7	235	411	157	276	299	524
	TOTAL		**107.59**	**2.14**	**0.99**	**4.05**	**104.46**				**235**	**411**	**157**	**276**	**299**	**524**

NOTE:

~~*Does not include unincorporated UGA North;*~~ ** 50% Reduction - Calculated in Available Land Column; ** Assumes 1.9 Persons Per Household (PPH);* ^^ Assumes 67% permanent dwellings, 33% second or vacation homes

Figure H-6: Buildable Lands Capacity Analysis

URBAN GROWTH AREA (EAST ONLY)

New Zoning	Existing Zoning	Zoning Description	Vacant Land	NWI Wetlands*	Coastal Wetlands	Wetland Buffers	Available Land	- 25% for Parks, Roads etc	- 25% for Market factor	Density	Total Homes	% Permanent Dwelling^^	Resident Population Projection**
			acres	acres	acres	acres	acres	acres	acres	du/acre	du		du
SFR	R1	Single Family Residential	80.24	67.44	N/A	4.88	7.92	5.94	4.46	7	31	21	40
REC	N/A	Parks, Recreation & Open Space	30.64	30.64	N/A	0.00	0.00	0.00	0.00	0	0	0	0
	TOTAL		**110.88**	**98.08**	**N/A**	**4.88**	**7.92**	**5.94**	**4.46**	**7**	**31**	**21**	**40**

NOTE:

*~~Does not include unincorporated UGA North~~; * 50% Reduction - Calculated in Available Land Column; ** Assumes 1.9 Persons Per Household (PPH)*

^^ Assumes 67% permanent dwellings, 33% second or vacation homes

I. Glossary

A

Absorption Rate
The length of time it takes for a parcel of real estate to be sold or rented.

Accessory Dwelling Unit
A dwelling unit that has been added onto or created within a single family house. It could be also refer to a structure detached from the principal building located on the same lot and customarily incidental and subordinate to the principal building or use.

Alternative Energy
Energy that is of non-fossil fuel and often times renewable sources.

Anchors
Public facilities that become the focal point of socialization, services and communication. These can be libraries, parks, community centers, city hall etc.

Annexation
The incorporation of land area into an existing community with a resulting change in the boundaries of that community.

Affordable Housing
Decent, quality housing that costs no more than 30% of a household's gross monthly income for rent/mortgage and utility payments.

Architectural Design Review Board
A board or commission designated by the City Council to review building plans and determine whether they conform to the standard outlined in either city codes (if form-based) or other any design guidelines (such as City of Long Beach Architectural Guidelines) and urban design plans.

Arterials
Streets that are relatively continuous, have relatively high traffic volumes, carry longer trips and have higher operating speeds.

Assisted Living Care
Residential stay option in which three or more unrelated individuals live together and are cared for.

B

C

Central Business District
The area of the City of Long Beach sometimes called "Old Town". The boundaries of the district are set out in the Land Use Plan.

City
The City of Long Beach.

Collectors
Streets that collect and distribute traffic between local roads and arterials.

Commercial Use
A land use activity that is associated with the sale and purchase of goods and services.

Comprehensive Plan
A generalized coordinated land use plan by the governing body and the citizens of a county or city, that is adopted and implemented.

Concurrency
When adequate capital facilities are available as development occurs.

Cottage Housing
A small, detached dwelling unit.

Cottage Industry
A home occupation that does not require retail sales or courier delivery services (as used in this plan).

Cottage Manufacturing Activities
A family owned and operated manufacturing business conducted in a residential or storefront unit. No equipment or process shall be used in such structures which create noise, vibration, glare, fumes, odors, or electrical interference detectable to the normal senses off the lot. Examples of Cottage Manufacturing Activities are: kite making, pottery studio, doll making, curios, painting studio, carving studio, etc.

Council
The city council of the City of Long Beach.

Critical Areas (Ordinance)

Cultural Heritage
Community identity based on a unique historic background.

Cluster
A design technique that concentrates buildings on a part of the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive features.

Coastal Village Theme
An architectural style described in the "City of Long Beach Architectural Guidelines" handbook. It is an architectural style that attempts to recreate the atmosphere associated with a turn-of-the-century seashore resort.

Commercial Core

Commercial Use
Activity involving the sale of goods or services carried out for profit.

Condominiums
A building or group of buildings, in which dwelling units, offices, or floor are are owned individually; and the structure, common areas, and facilities are owned by all the owners on a proportional, undivided basis.

D

Density
A measure of the intensity of development, generally expressed in terms of dwelling units per acre or Floor Area Ratio.

Developer
A person who builds housing, highways, commercial and industrial structures, etc.

Dwelling Unit
An enclosure containing sleeping, kitchen, and bathroom facilities designed for use as a residence.

E

Easement
A grant of one or more of the property rights by the property owner to and/or for use by the public, a corporation, or another person or entity.

Edges
Marks the outer limits of a city; where the city is first or last experienced. Edges can be a combination of hard (roads or buildings) or soft (water bodies, parks, etc) features.

Eco-tourism
Low impact, nature oriented tourist activities that involve an interaction of groups of people with the environment and natural resources in an area.

Economic Generators
Large concentrations of commercial uses that help fortify local revenue. These are typically downtowns, neighborhood commercial areas, industrial areas, etc.

Environmental Graphics

Environs
The unincorporated areas surrounding the city limits of the City of Long Beach.

F

Foster care
To give care without being related by blood or legal ties.

G

Goal
A general statement that reflects a positive and realistic view of what could be or an ideal situation.

Green Development
Type of development that is designed according to environmentally friendly principles.

Greenway
A landscaped path or boulevard.

Greenbelt
An open area that may be cultivated or maintained in a natural state surrounding development or used as a buffer between land uses or to mark the edge of an urban or developed area.

Group homes
Unrelated individuals living together and being cared for in a residential facility.

Growth Management Act (GMA)
Adopted by the Washington State Legislature in 1990, the Act requires state and local governments to manage Washington's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing comprehensive plans and implementing them.

H

Hotel
A facility offering transient lodging accommodations to the general public and providing additional services, such as restaurants, meeting rooms, entertainment, and recreational facilities. Facilities of these types can also be referred to as Motel, Boarding House, Inn, Resort, Tourist Home, Guests Home, Bed and Breakfast.

Housing (see Residential Use)

I

Incompatible Use
A use that is incapable of existing in harmony with other uses situated in its immediate vicinity.

Incorporated
An area organized as a legal corporation. Long Beach is an incorporated city.

Industrial Use
Activities predominantly associated with manufacturing, assembling, processing, or storing of products.

Intensity (also Intensity of Use or Development Use)
The number of dwelling units per acre or floor area ratio (FAR).

J

Joint Planning

K

L

Land Use
A description of how land is occupied or utilized.*

Level of Service [LOS]
Defines the quality and quantity of service provided by a community's infrastructure and services. It can be defined for a wide range of facilities and services, including transportation, potable water, sewer, fire, parks and schools.

Light Industrial
Industrial uses that meet the performance standards, bulk controls, and other requirements established in an ordinance.

Live-work

Local Roads
Streets that provide access to adjacent properties.

M

Manufactured Home
A dwelling unit composed of components assembled in a manufacturing plant and transported to the building site for final assembly on a permanent foundation. All manufactured homes in Long Beach shall conform to the standards set forth in RCW 35A.63.145.

Mixed-Use
Land use type that allows development of a tract of land, building, or structure with a variety of complementary and integrated uses, such as, but not limited to, residential, office, manufacturing, retail, public, or entertainment, in a compact urban form.

Multi-family Housing
Housing designed to accommodate more than one household or family. Duplex, Triplex, Apartments, and Condominium structures are examples of multi-family housing.

N

Neighborhoods
Portions of the city that are well defined by boundaries and anchored by a central community facility.

O

Objective
A measurable statement of what must be accomplished to reach a goal.

Office Use (also see Commercial Use)
Land use activity that allows for the establishment of an Office Building used primarilly for conducting the afairs of a business, profession, sevice, industry, or government, or like activity. May include ancillary services for office workers, such as restaurant, coffee shop, mewspaper or candy stand, and child-care facilities.

Ordinances
A municipally adopted law or regulation.

Owner Occupied

P

Parks
A tract of land, designated and used by the public for active and passive recreation.

Planned Unit Development
A fully contained development characterized by urban densities, uses and services.

Policy
A statement that defines an action intended to achieve an objective.

Permeable Pavement
Type of pavement that allows the movement of water, air and other fluids through the paving material.

Public Facilities
Include streets, roads, highways, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, government buildings, hospitals, and schools.

Public Land
Consist of public buildings and grounds and public facilities.

Public Utilities

Includes systems for the delivery of natural gas, electricity, telecommunications services, as well as water and sewer pipe lines.

Q

Quasi Public

R

Recreation
Activities associated with any form of play, amusement, or relaxation, such as games, sports, hobbies, hiking, biking, walking, etc.

Recreational Vehicle
A vehicular-type portable structure without permanent foundation that can be towed, hauled or driven and primarily designed as a temporary living accommodation for recreational, camping, and travel use and including, but not limited to, travel trailers, truck campers, camping trailers and self-propelled motor homes.

Rental
Property occupied by a tenant paying rent to an owner and no part of the rent is used to acquire equity in the property.

Rental/Apartments

Residential Use
Used in this plan for all types of dwelling units such as single and multi-family housing including manufactured homes.

Resort
Retail activities that support tourism such as hotels, motels, shops, and restaurants.

Retail Use (also see Commercial Use)

Land use activity engaged in selling goods or merchandise to the general public for personal or household consumption and rendering services incidental to the sale of such goods.

Row Houses
An attached dwelling separated from others in a row by a vertical unpierced wall extending from basement to roof. (see Townhouse)

S

Seasonal Dwelling Home
A dwelling unit not used as a principal residence that may be occupied weekends and for brief periods during the year.

Service Area

The area that serves and is served by transportation, utilities and capital facilities and systems.

Structure
Anything constructed or erected.

Subdivision
The division of a tract of land into two or more lots, building sites, or other divisions for the purpose of sale or building development (whether immediate or future) and including all divisions of land involving the dedication of a new street or a change in existing streets.

T

Townhouse
A one-family dwelling in a row of at least three such units in which each unit has its own front and rear access to the outside, no unit is located over another unit, and each unit is separated from any other unit by one or more vertical common fire-resistant walls.

Transfer of Development Rights
The removal of the right to develop or build, expressed in dwelling units per acre or floor area, from land in one zoning district to land in another district where such transfer is permitted.

U

Urban Growth Area
A defined region, not always coincidental with a municipality's corporate boundary, that defines the geographical limit of government-supplied public facilities and services.

Urban Growth Boundary
Boundary designating areas of existing and future urban growth that makes intensive use of land for residential, commercial, industrial development.

V

Vacant Land
(1) Land that is undeveloped and unused; (2) any nonresidential areas with significant amount of land not covered by nonstructural impervious surfaces; (3) land suitable for redevelopment or infill at higher densities; and (4) residential areas with lot sizes in excess of two acres where environmental factors permit higher densities.

Vacation Homes (see Seasonal Dwelling Unit)

W

Wayfinding
Refers to the ways in which people orient themselves in physical space and navigate from place to place.

X

Y

Z

Zoning
The delineation of districts and the establishment of regulations governing the use, placement, spacing, and size of land and buildings.

J. List of Figures